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DEPARTMENT OF THE INTERIOR,
CENSUS OFFICE.

ROBERT P. PORTER,
Superintendent.
Appointed April 20, 1889; resigned July 31, 1893.

CARROLL D. WRIGHT,
Commissioner of Labor in charge.
Appointed October 5, 1893.

REPORT

ON

TRANSPORTATION BUSINESS

IN

THE UNITED STATES

AT THE

ELEVENTH CENSUS: 1890.

PART II.—TRANSPORTATION BY WATER.

HENRY C. ADAMS,
SPECIAL AGENT.

WASHINGTON, D. C.:
GOVERNMENT PRINTING OFFICE.
1894.

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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
CENSUS OFFICE,
WASHINGTON, D. C., October 24, 1894.

SIR:

I have the honor to transmit herewith the text and statistical tables of Part II of the Report on Transportation for the Eleventh Census, pertaining to waterways, together with the statistics relating to express companies, bound for convenience in the same volume.

The subdivisions of the volume are as follows:

Atlantic coast and Gulf of Mexico.
Pacific coast.
Great Lakes.
Rivers of the Mississippi valley.
Canals and canalized rivers.
Express companies.

The work of tabulation has been done by Mr. Thomas J. Vivian, under the direction of Mr. Henry C. Adams (statistician of the Interstate Commerce Commission), special agent of the Census in charge of transportation.

I am, very respectfully, your obedient servant,

CARROLL D. WRIGHT,
Commissioner of Labor in charge.

Hon. HOKE SMITH,
Secretary of the Interior.

INTRODUCTION.

The statistics of the accompanying report on transportation are grouped under the following divisions:

1. Atlantic coast and Gulf of Mexico.
2. Pacific coast.
3. Great Lakes.
4. Rivers of the Mississippi valley.
5. Canals and canalized rivers.

Following these divisions of water transportation, the statistics of express companies for both land and water are given.

The totals of the five divisions represent the returns for the United States as made to the Census Office. The year of report is that ending December 31, 1889, that period having been selected in accord with the provision for using the fiscal year of reporting returns ending nearest June 1, 1890, because operations on rivers, lakes, and canals are bounded to such an extent by the opening and closing of navigation, and because most of the large shipping concerns on the coasts follow the calendar rather than the fiscal year in their accounts.

Tabulations are compiled as totals for the United States on the following subjects:

Equipment—number, gross tonnage, and commercial value of all craft.
Traffic operations—amount of freight moved and number of passengers carried by all craft.
Financial accounts—gross earnings, expenses, and net earnings of all craft.
Comparative statistics—corresponding data for the Tenth and the Eleventh Censuses.

The totals for the five divisions and for the United States are given in Tables 1 to 8, following. Table 9 contains by divisions the totals of the sums appropriated by Congress for the maintenance and improvement of waterways.

The report made by the Tenth Census having been confined to the operations of steamers, the statistics that can be used for comparison between the Tenth and the Eleventh Censuses are limited.

By the term "all craft" is meant all steamers, sailing vessels, and unrigged craft of over 5 tons burden, whether registered in the customs districts or owned without registration, the latter being mostly unrigged craft.

By the term "unrigged craft" is meant all vessels having no motive power of their own.

The report for the Pacific coast does not include returns for Alaska.

The report for the Great Lakes includes the returns from Lake Champlain for 1889. In the comparative tables Lake Champlain is not included, as the Tenth Census did not collect the data in question.

Returns for the Red River of the North, for convenience, are included in the report for the rivers of the Mississippi valley.

TABLE 1.—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT OF OVER 5 TONS BURDEN, REGISTERED OR OWNED IN THE UNITED STATES DECEMBER 31, 1889.

DIVISIONS.	TOTAL OF ALL CRAFT.			STEAMERS.			SAILING VESSELS.			UNRIGGED CRAFT.		
	Number of vessels.	Gross tonnage.	Commercial valuation.	Number of vessels.	Gross tonnage.	Commercial valuation.	Number of vessels.	Gross tonnage.	Commercial valuation.	Number of vessels.	Gross tonnage.	Commercial valuation.
The United States	32,059	8,603,489	$220,774,250	6,205	1,833,062	$141,266,570	8,917	1,797,071	$57,275,727	16,937	4,973,356	$22,231,953
Atlantic coast and Gulf of Mexico.	13,466	2,862,630	127,676,487	2,933	837,162	73,554,540	7,108	1,401,985	46,284,507	3,425	623,483	7,837,440
Pacific coast	1,842	441,939	23,067,370	531	170,503	15,526,455	822	208,080	6,715,570	489	63,356	825,345
Great Lakes	2,784	926,355	48,941,474	1,489	599,949	41,193,324	987	187,006	4,275,650	308	139,400	3,472,500
Rivers of the Mississippi valley.	7,453	3,393,380	15,335,005	1,114	210,772	10,539,251	....	....	....	6,339	3,182,608	4,795,754
Canals and canalized rivers.	6,514	979,185	5,753,914	138	14,676	453,000	....	....	....	6,376	964,509	5,300,914

TABLE 2.—NUMBER, AVERAGE GROSS TONNAGE, AND AVERAGE COMMERCIAL VALUATION PER VESSEL AND PER GROSS TON OF ALL CRAFT ON DECEMBER 31, 1889.

DIVISIONS.	TOTAL OF ALL CRAFT.				STEAMERS.				SAILING VESSELS.				UNRIGGED CRAFT.			
	Number of vessels.	Average gross tonnage per vessel.	Average commercial valuation per vessel.	Average commercial valuation per ton.	Number of vessels.	Average gross tonnage per vessel.	Average commercial valuation per vessel.	Average commercial valuation per ton.	Number of vessels.	Average gross tonnage per vessel.	Average commercial valuation per vessel.	Average commercial valuation per ton.	Number of vessels.	Average gross tonnage per vessel.	Average commercial valuation per vessel.	Average commercial valuation per ton.
The United States	32,059	268	$6,886	$25.66	6,205	295	$22,767	$77.07	8,917	202	$6,423	$31.87	16,937	294	$1,313	$4.47
Atlantic coast and Gulf of Mexico.	13,466	213	9,481	44.60	2,933	285	25,078	87.86	7,108	197	6,512	33.01	3,425	182	2,288	12.57
Pacific coast	1,842	240	12,523	52.20	531	321	29,240	91.06	822	253	8,170	32.27	489	130	1,688	13.03
Great Lakes	2,784	333	17,580	52.83	1,489	403	27,665	68.66	987	189	4,332	22.86	308	453	11,274	24.91
Rivers of Mississippi valley	7,453	455	2,058	4.52	1,114	189	9,461	50.00					6,339	502	757	1.51
Canals and canalized rivers	6,514	150	883	5.88	138	106	3,283	30.87					6,376	151	831	5.50

TABLE 3.—TONS OF FREIGHT MOVED AND NUMBER OF PASSENGERS CARRIED BY THE OPERATING STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT, EXCLUSIVE OF RAILROAD FERRIES, DURING THE YEAR ENDING DECEMBER 31, 1889.

DIVISIONS.	FREIGHT IN TONS.				Passengers.
	Total.	Steamers.	Sailing vessels.	Unrigged craft.	
The United States	182,848,402				169,857,143
Atlantic coast and Gulf of Mexico	80,695,665	28,791,438	39,801,533	12,102,694	*a*152,742,927
Pacific coast	8,818,363	*b*5,741,940	2,761,826	314,597	*c*4,019,329
Great Lakes	*d*53,424,432				2,235,993
Rivers of the Mississippi valley	29,405,046	10,345,504		19,059,542	10,858,894
Canals and canalized rivers	10,504,896			10,504,896	

a Seventeen million four hundred and eighty-two thousand five hundred and thirty-one ferry passengers carried on railroad tickets not included in above figures.
b Two million four hundred and thirty-one thousand five hundred and sixty-four tons of railroad ferry freight not included in above figures.
c Eleven million six hundred and fifty-two thousand seven hundred and sixty-four ferry passengers carried on railroad tickets not included in above figures.
d No segregated report made of freight movement by classes of vessels.

TABLE 4.—GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF ALL OPERATING CRAFT DURING THE YEAR ENDING DECEMBER 31, 1889.

DIVISIONS.	Gross earnings.	Expenses.	Net earnings.
The United States	$166,838,776	$130,257,970	$36,580,806
Atlantic coast and Gulf of Mexico	90,147,632	70,226,792	19,920,840
Pacific coast	20,628,316	17,274,809	3,353,507
Great Lakes	35,636,163	28,033,651	7,602,512
Rivers of the Mississippi valley	16,337,533	12,600,342	3,737,191
Canals and canalized rivers	4,089,132	2,122,376	1,966,756

TABLE 5.—TOTAL NUMBER OF COMMON SEAMEN EMPLOYED AND THE AVERAGE MONTHLY WAGES PAID TO EACH, AND NUMBER OF EMPLOYÉS MAKING ORDINARY CREWS AND THE TOTAL WAGES PAID THEM DURING THE YEAR ENDING DECEMBER 31, 1889.

DIVISIONS.	Common seamen employed.	Average wages paid per month to common seamen.	Number making ordinary crews.	Total wages paid during year to all employés.
The United States	25,848	$26.43	114,736	$41,729,842
Atlantic coast and Gulf of Mexico	17,418	21.38	63,625	22,123,099
Pacific coast	4,302	38.36	12,181	6,127,451
Great Lakes	4,128	35.30	22,934	8,140,430
Rivers of the Mississippi valley			15,996	5,338,862
Canals and canalized rivers (*a*)				

a Not reported.

TABLE 6.—COMPARATIVE STATISTICS—NUMBER, GROSS TONNAGE, AND COMMERCIAL VALUATION OF ALL STEAMERS IN 1880 AND 1889.

DIVISIONS.	Years.	Number of steamers.	Gross tonnage of steamers.	Commercial valuation of steamers.
The United States	1880	4,659	1,185,074	$77,800,525
	1889	6,045	1,814,250	140,489,070
Atlantic coast and Gulf of Mexico	1880	2.195	613,986	45,394,700
	1889	2,933	837,162	73,554,540
Pacific coast	1880	319	97,005	6,477,500
	1889	531	170,503	15,526,455
Great Lakes (exclusive of Lake Champlain)	1880	947	222,290	13,918,925
	1889	1,467	595 813	40,868,824
Rivers of the Mississippi valley	1880	1,198	251,793	12,039,400
	1889	1,114	210,772	10,539,251

TABLE 7.—COMPARATIVE STATISTICS—GROSS EARNINGS OF ALL STEAMERS OPERATING IN 1880 AND 1889, TOGETHER WITH THE AMOUNT PAID IN WAGES DURING THOSE YEARS.

DIVISIONS.	Years.	Gross earnings of steamers.	Paid in wages on steamers.
The United States	1880	$83,222,936	$25,191,515
	1889	102,527,042	26,056,988
Atlantic coast and Gulf of Mexico	1880	44,430,765	12.964,874
	1889	48,003,020	11,239,169
Pacific coast	1880	6,362,770	1,953,451
	1889	13,237,222	3,682,062
Great Lakes (exclusive of Lake Champlain)	1880	12,136,228	3,293,964
	1889	24,949,267	5,796,895
Rivers of the Mississippi valley	1880	20,293,173	6,979,226
	1889	16,337,533	5,338,862

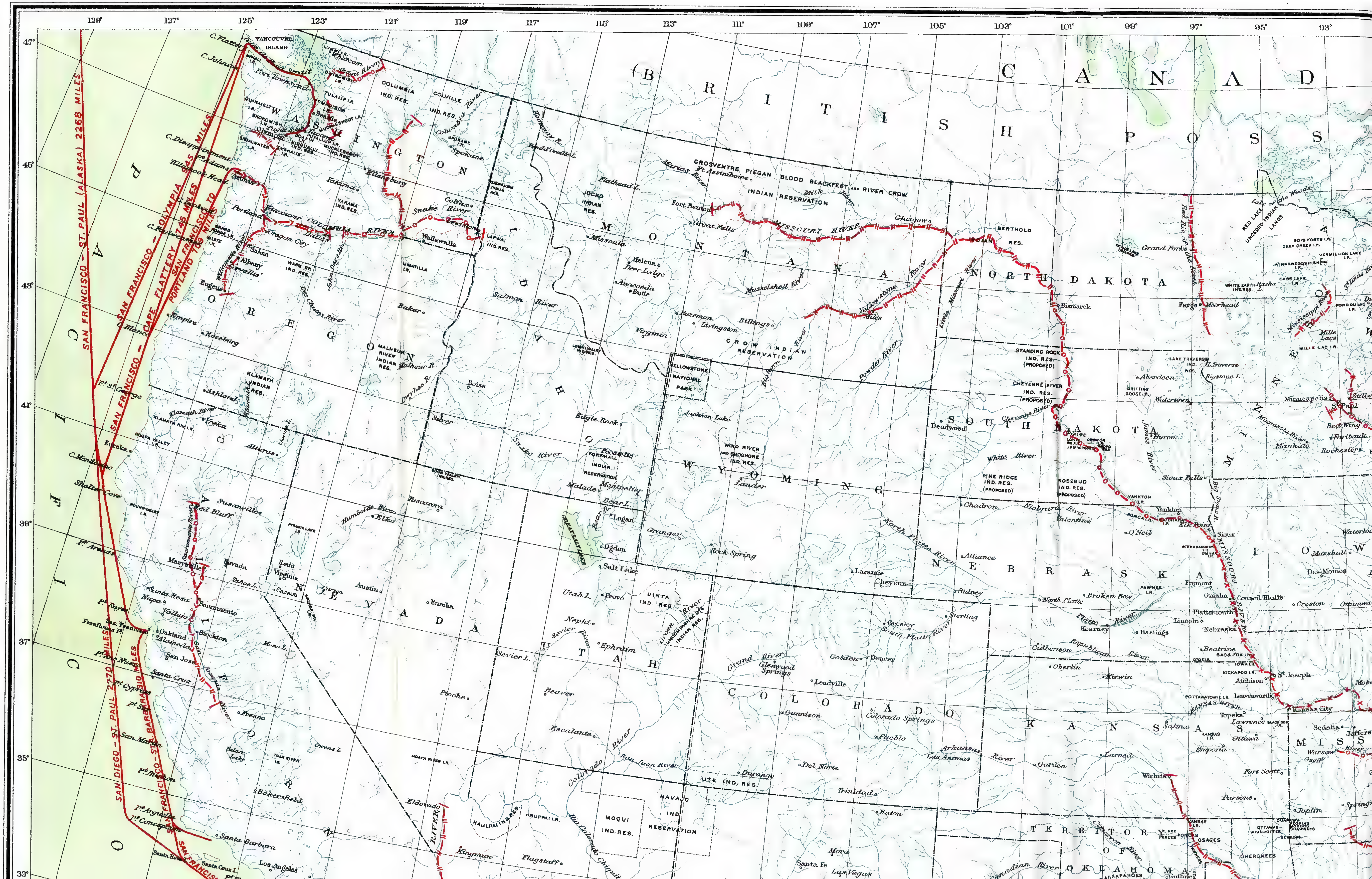
TABLE 8.—COMPARATIVE STATISTICS—NUMBER OF EMPLOYÉS CONSTITUTING THE ORDINARY CREWS OF ALL STEAMERS OPERATING IN 1880 AND 1889, WITH WAGES PAID, AVERAGES OF ANNUAL PAY, AND DECREASE OR INCREASE PER EMPLOYÉ.

DIVISIONS.	Years.	Number making ordinary crews of steamers.	Total wages paid during year on steamers.	Average annual wages paid per steamer employé.	Average annual increase in wages per steamer employé.	Average annual decrease in wages per steamer employé.
The United States	1880	60.677	$25,191,515	$415.17	....	....
	1889	63,738	26,056,988	408.81	....	$6.36
Atlantic coast and Gulf of Mexico	1880	24,910	12,964,874	520.47	....	....
	1889	25,653	11.239,169	438.12	....	82.35
Pacific coast	1880	3,008	1.953,451	649.42	....	....
	1889	6,818	3,682,062	540.05	....	109.37
Great Lakes (exclusive of Lake Champlain)	1880	9,143	3,293,964	360.27	....	....
	1889	15,271	5,796,895	379.60	$19.33	....
Rivers of the Mississippi valley	1880	23,616	6,979,226	295.53	....	....
	1889	15,996	5.338,862	333.76	38.23	....

TABLE 9.—SUMS APPROPRIATED BY CONGRESS FOR SURVEY, IMPROVEMENT, AND MAINTENANCE OF WATERWAYS AND HARBORS BY PERIODS FROM THE EARLIEST DATE OF APPROPRIATION TO 1890, INCLUSIVE.

DIVISIONS.	Date of earliest appropriations.	Total appropriations up to date.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress, September 19, 1890.
The United States	....	$208,411,274	$92,406,052	$91,434,327	$24,570.895
Atlantic coast and Gulf of Mexico	1821	79,582,684	37,480,428	33,293,406	8,808,850
Pacific coast	1852	9,964,800	2,315,000	5,527,200	2,122,600
Great Lakes	1823	42,036,327	24,409,917	13,323,165	4,303,245
Rivers of the Mississippi valley	1819	76,827,463	28,200,707	39,290,556	9,336,200
Canals and canalized rivers (*a*)	....	....	....	....	....

[a] The appropriations for canals and canalized rivers are included in the reports for those localities (coasts, lakes, or rivers) in which they are situated.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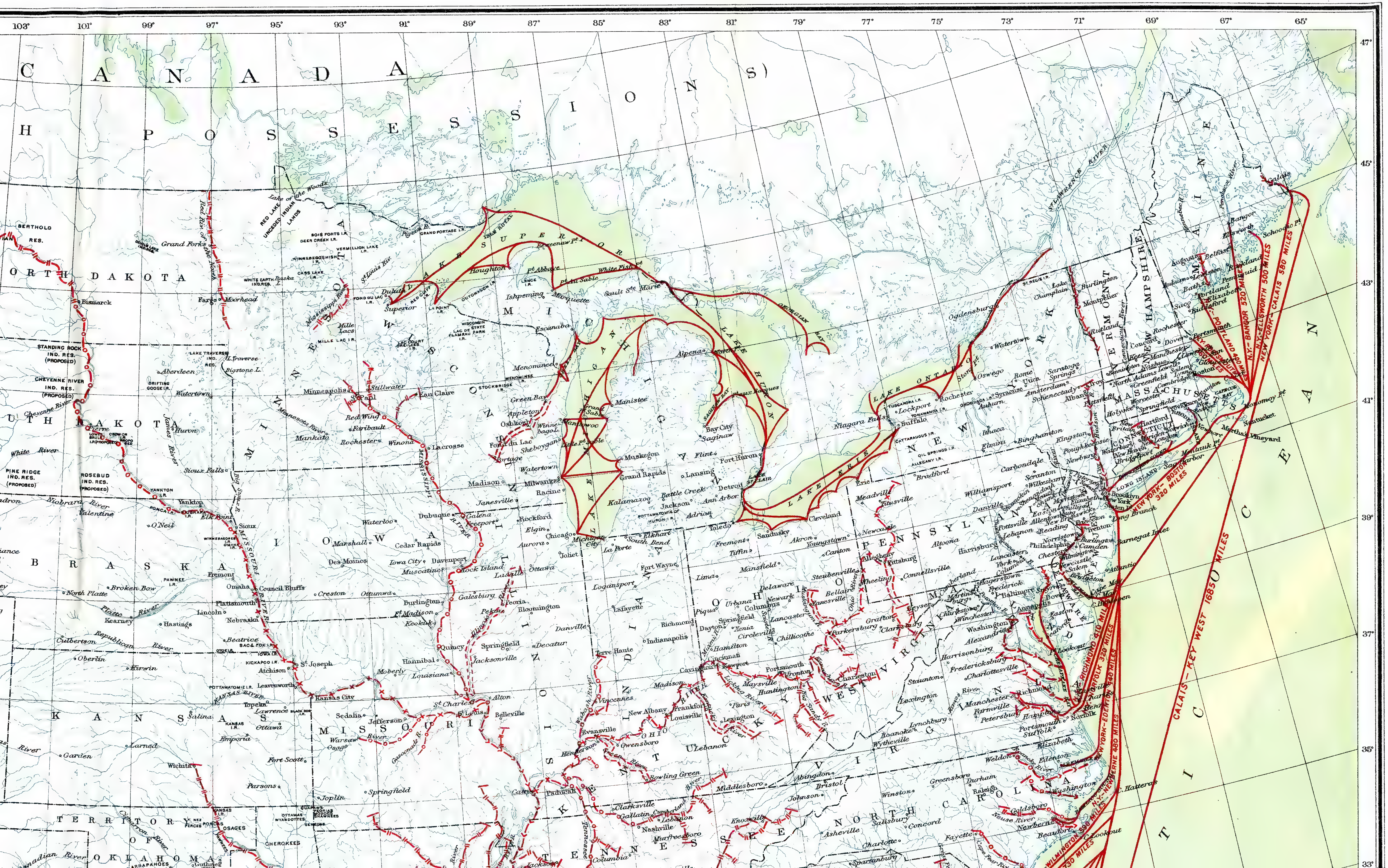
(BRITISH POSSESSIONS)
CANADA
PACIFIC OCEAN
SAN FRANCISCO – ST. PAUL (ALASKA) 2268 MILES
SAN FRANCISCO – OLYMPIA 745 MILES
SAN FRANCISCO – CAPE FLATTERY 745 MILES
SAN FRANCISCO TO PORTLAND 700 MILES
SAN DIEGO – ST. PAUL 2770 MILES
SAN FRANCISCO – ST. BARBARA 310 MILES
VANCOUVER ISLAND
C. Flattery
Juan de Fuca Strait
C. Johnson
Port Townsend
WASHINGTON
OREGON
CALIFORNIA
NEVADA
IDAHO
MONTANA
WYOMING
UTAH
COLORADO
NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
KANSAS
IOWA
MINNESOTA
MISSOURI
TERRITORY OF OKLAHOMA
Whatcom
Skagit River
LUMMI I.R.
SWINOMISH I.R.
TULALIP I.R.
MAKAH I.R.
QUINAIELT I.R.
SKOKOMISH I.R.
Seattle
Olympia
Tacoma
Puget Sound
SHOALWATER I.R.
CHEHALIS I.R.
NISQUALLY I.R.
PUYALLUP I.R.
MUCKLESHOOT I.R.
MADISON I.R.
COLUMBIA IND. RES.
COLVILLE IND. RES.
SPOKANE I.R.
Spokane
Columbia River
Ellensburg
Yakima
YAKAMA IND. RES.
Colfax
Snake River
Lewiston
Wallawalla
LAPWAI IND. RES.
COEUR D'ALENE INDIAN RES.
C. Disappointment
Pt. Adams
Tillamook Head
Astoria
Portland
Vancouver
Oregon City
Dalles
COLUMBIA RIVER
GRAND RONDE I.R.
SILETZ I.R.
Salem
Albany
Corvallis
Willamette River
Eugene
WARM SP. IND. RES.
UMATILLA I.R.
John Day R.
Des Chutes River
Baker
C. Blanco
Empire
Roseburg
MALHEUR INDIAN RES.
Malheur R.
Owyhee R.
Pt. St. George
Ashland
KLAMATH INDIAN RES.
Klamath River
KLAMATH RIV. I.R.
Yreka
HOOPA VALLEY I.R.
Eureka
Alturas
Goose L.
C. Mendocino
Shelter Cove
ROUND VALLEY I.R.
Susanville
Red Bluff
Sacramento River
Pt. Arenas
Marysville
Nevada
Tahoe L.
Reno
Virginia
Carson
PYRAMID LAKE I.R.
WALKER RIV. I.R.
Santa Rosa
Napa
Vallejo
Sacramento
Pt. Reyes
Farallone Is.
San Francisco
Oakland
Alameda
Stockton
San Jose
San Joaquin River
Pt. Ano Nuevo
Santa Cruz
Pt. Cypress
Pt. Sur
San Martin
Fresno
Mono L.
Owens L.
Tulare Lake
TULE RIVER I.R.
Pt. Buchon
Bakersfield
Pt. Arguello
Pt. Concepcion
Santa Barbara
Santa Rosa I.
Santa Cruz I.
Los Angeles
Kootenay R.
Pend d'Oreille L.
Flathead L.
JOCKO INDIAN RES.
Missoula
Helena
Deer Lodge
Anaconda
Butte
Marias River
Ft. Assiniboine
Fort Benton
Great Falls
GROSVENTRE PIEGAN BLOOD BLACKFEET AND RIVER CROW INDIAN RESERVATION
Milk River
MISSOURI RIVER
Glasgow
Musselshell River
Bozeman
Livingston
Billings
Virginia
CROW INDIAN RESERVATION
Bighorn River
Yellowstone River
Miles
Powder River
Salmon River
LEMHI VALLEY IND. RES.
Boise
Silver
Snake River
DUCK VALLEY IND. RES.
Eagle Rock
Pocatello
FORT HALL INDIAN RESERVATION
Malade
Montpelier
Bear L.
Bear R.
Logan
Ogden
GREAT SALT LAKE
Salt Lake
YELLOWSTONE NATIONAL PARK
Jackson Lake
WIND RIVER AND SHOSHONE IND. RES.
Lander
Granger
Rock Spring
North Platte River
Laramie
Cheyenne
Humboldt River
Elko
Tuscarora
Austin
Eureka
Pioche
MOAPA RIVER I.R.
Eldorado
Utah L.
Provo
UINTA IND. RES.
UNCOMPAHGRE IND. RES.
Green River
Nephi
Sevier River
Sevier L.
Ephraim
Beaver
Escalante
Colorado River
San Juan River
UTE IND. RES.
Durango
MOQUI IND. RES.
NAVAJO IND. RESERVATION
HUALPAI IND. RES.
SUPPAI I.R.
Rio Colorado Chiquito
Kingman
Flagstaff
Grand River
Glenwood Springs
Leadville
Gunnison
Golden
Denver
Greeley
South Platte River
Sterling
Colorado Springs
Pueblo
Del Norte
Trinidad
Arkansas River
Las Animas
Raton
Santa Fe
Mora
Las Vegas
Canadian River
Cimarron River
BERTHOLD RES.
Little Missouri River
Bismarck
STANDING ROCK IND. RES. (PROPOSED)
CHEYENNE RIVER IND. RES. (PROPOSED)
Cheyenne River
Deadwood
Pierre
LOWER BRULE I.R.
CROW CREEK I.R.
White River
PINE RIDGE IND. RES. (PROPOSED)
ROSEBUD IND. RES. (PROPOSED)
YANKTON I.R.
Yankton
PONCA I.R.
NIOBRARA I.R.
Chadron
Niobrara River
Valentine
Alliance
Sidney
North Platte
Broken Bow
Platte River
Kearney
Hastings
Culbertson
Republican River
Oberlin
Kirwin
Devils Lake Ind. Res.
Grand Forks
Red River of the North
Fargo
Moorhead
James River
Huron
Aberdeen
LAKE TRAVERSE IND. RES.
L. Traverse
Bigstone L.
Watertown
DRIFTING GOOSE I.R.
Sioux Falls
Big Sioux R.
Elk Point
Sioux
O'Neil
WINNEBAGO I.R.
OMAHA I.R.
PAWNEE I.R.
Fremont
Omaha
Council Bluffs
Plattsmouth
Lincoln
Nebraska
Beatrice
SAC & FOX I.R.
OTOE I.R.
IOWA I.R.
KICKAPOO I.R.
Atchison
St. Joseph
POTTAWATOMIE I.R.
Leavenworth
Kansas City
Kansas River
Topeka
Lawrence
BLACK BOB I.R.
KANSAS I.R.
Ottawa
Emporia
Salina
Larned
Garden
Wichita
Fort Scott
Parsons
Joplin
Sedalia
Jefferson
Warsaw
Osage River
Springfield
OSAGES
KANSAS
PONCAS
NEZ PERCES
OTTAWAS
WYANDOTTES
QUAPAWS
PEORIAS
MODOCS
SHAWNEES
SENECAS
CHEROKEES
ARRAPAHOES
Guthrie
Marshall
Des Moines
Creston
Ottumwa
Waterloo
RED LAKE I.R.
UNCEDED INDIAN LANDS
Lake of the Woods
BOIS FORTS I.R.
DEER CREEK I.R.
VERMILLION LAKE I.R.
WINNEBAGOSHISH I.R.
CASS LAKE I.R.
WHITE EARTH IND. RES.
Itaska L.
FOND DU LAC I.R.
Mississippi River
Mille Lacs
MILLE LAC I.R.
Minneapolis
St. Paul
Stillwater
St. Louis River
Minnesota River
Mankato
Red Wing
Faribault
Rochester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CANADA
H POSSESSIONS)
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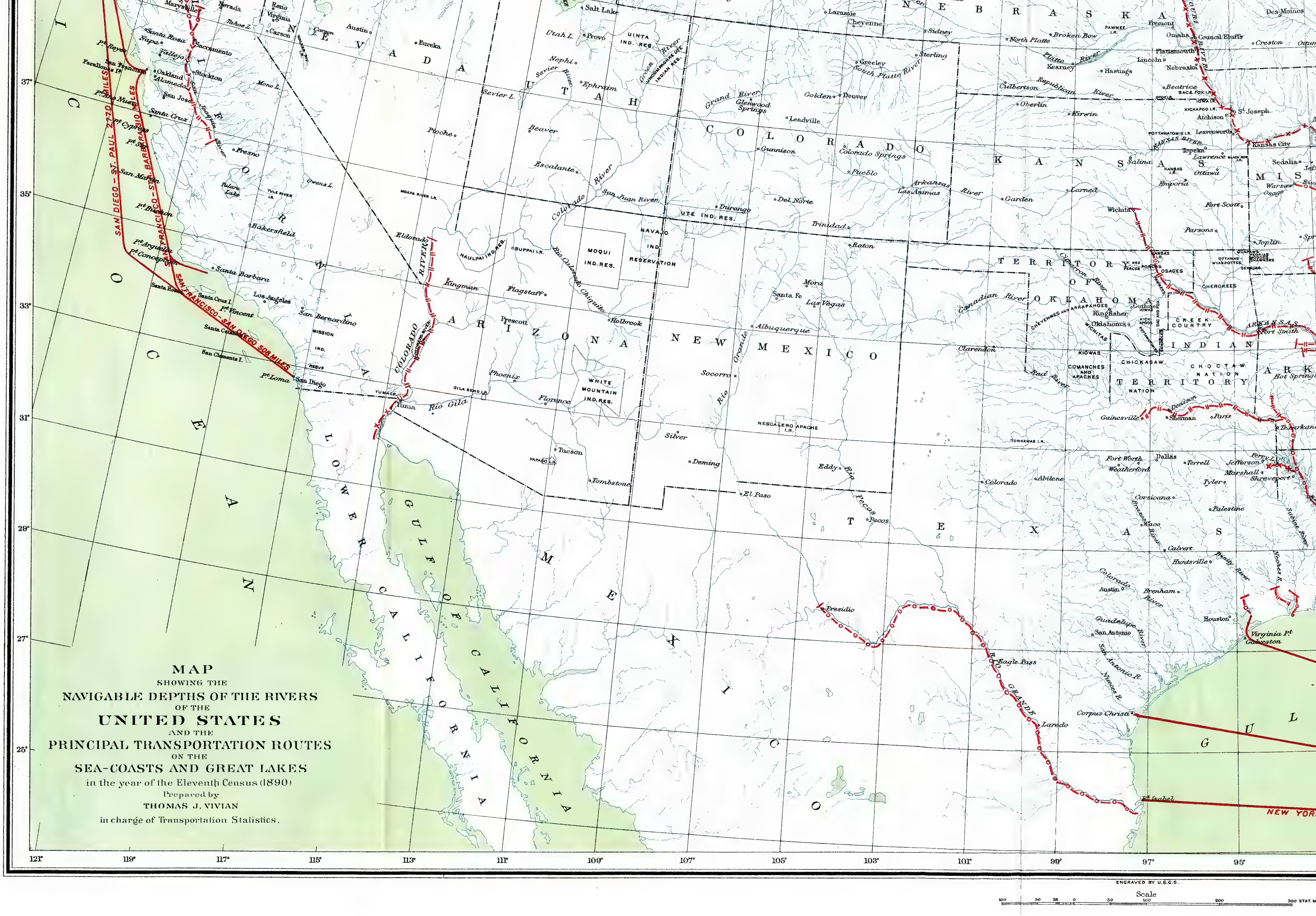
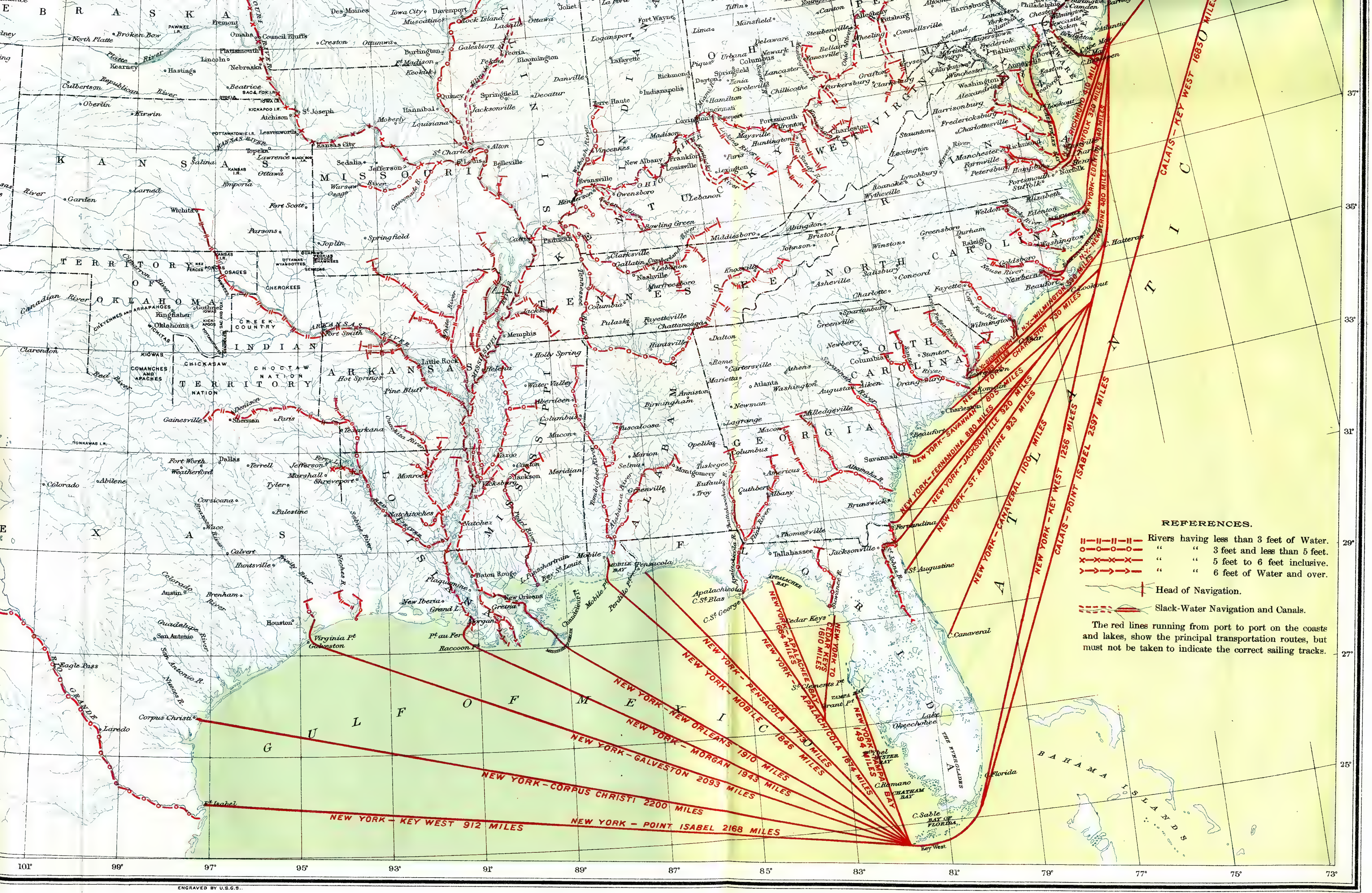
MISSOURI
ILLINOIS
INDIANA
OHIO
MICHIGAN
KENTUCKY
TENNESSEE
WEST VIRGINIA
VIRGINIA
NORTH CAROLINA
PENNSYLVANIA
NEW YORK
NEW JERSEY
DELAWARE
MARYLAND
VERMONT
NEW HAMPSHIRE
MAINE
MASSACHUSETTS
CONNECTICUT
RHODE
INDIAN TERRITORY
OKLAHOMA
ATLANTIC OCEAN
LAKE SUPERIOR
LAKE MICHIGAN
LAKE HURON
LAKE ERIE
LAKE ONTARIO
GEORGIAN BAY
SAGINAW BAY
LAKE ST. CLAIR
ST. LAWRENCE RIVER
MISSISSIPPI RIVER
MISSOURI RIVER
PLATTE RIVER
Red River of the North
OHIO RIVER
LONG ISLAND
CAPE COD BAY
Lake of the Woods
Duluth
Superior
Houghton
Marquette
Sault Ste Marie
Chicago
Milwaukee
Detroit
Toledo
Cleveland
Buffalo
Erie
Oswego
St. Paul
Minneapolis
St. Louis
Cairo
Pittsburg
Cincinnati
Louisville
New York
Boston
Philadelphia
Baltimore
Washington
Norfolk
Portland
Bangor
Ellsworth
Calais
Schoodic Pt.
C. Hatteras
C. Lookout
Cape May
C. Henlopen
Nantucket
Martha's Vineyard
Monomoy Pt.
NEW YORK - BOSTON 320 MILES
N.Y. - PORTSMOUTH 360 MILES
N.Y. - PORTLAND 400 MILES
N.Y. - BANGOR 520 MILES
N.Y. - ELLSWORTH 500 MILES
NEW YORK - CALAIS 580 MILES
CALAIS - KEY WEST 1685 MILES
N.Y. - RICHMOND 410 MILES
N.Y. - NORFOLK 320 MILES
NEW YORK - EDENTON 440 MILES
N.Y. - NEWBERNE 480 MILES
N.Y. - WILMINGTON 590 MILES
730 MILES



MAP
SHOWING THE
NAVIGABLE DEPTHS OF THE RIVERS
OF THE
UNITED STATES
AND THE
PRINCIPAL TRANSPORTATION ROUTES
ON THE
SEA-COASTS AND GREAT LAKES
in the year of the Eleventh Census (1890)
Prepared by
THOMAS J. VIVIAN
in charge of Transportation Statistics.


NEW YORK – KEY WEST 912 MILES
NEW YORK – POINT ISABEL 2168 MILES
NEW YORK – CORPUS CHRISTI 2200 MILES
NEW YORK – GALVESTON 2093 MILES
NEW YORK – MORGAN 1943 MILES
NEW YORK – NEW ORLEANS 1910 MILES
NEW YORK – MOBILE 1846 MILES
NEW YORK – PENSACOLA 1773 MILES
NEW YORK – APALACHICOLA 1674 MILES
NEW YORK – APALACHEE BAY 1664 MILES
NEW YORK TO CEDAR KEYS 1610 MILES
NEW YORK – TAMPA BAY 1494 MILES
NEW YORK – CANAVERAL 1100 MILES
NEW YORK – KEY WEST 1256 MILES
CALAIS – POINT ISABEL 2597 MILES
CALAIS – KEY WEST 1685 MILES
NEW YORK – ST. AUGUSTINE 923 MILES
NEW YORK – JACKSONVILLE 920 MILES
NEW YORK – FERNANDINA 880 MILES
NEW YORK – SAVANNAH 805 MILES
NEW YORK – CHARLESTON 730 MILES
N.Y. – GEORGETOWN 660 MILES
N.Y. – WILMINGTON 590 MILES
N.Y. – NEWBERNE 480 MILES
NEW YORK – EDENTON 440 MILES
N.Y. – NORFOLK 320 MILES
N.Y. – RICHMOND 410 MILES
GULF OF MEXICO
ATLANTIC
BAHAMA ISLANDS
NEBRASKA
KANSAS
MISSOURI
ILLINOIS
INDIANA
OHIO
KENTUCKY
WEST VIRGINIA
VIRGINIA
MARYLAND
DELAWARE
NEW JERSEY
NORTH CAROLINA
SOUTH CAROLINA
TENNESSEE
GEORGIA
ALABAMA
MISSISSIPPI
ARKANSAS
LOUISIANA
TEXAS
FLORIDA
TERRITORY OF OKLAHOMA
INDIAN TERRITORY
CHEROKEES
CREEK COUNTRY
CHOCTAW NATION
CHICKASAW NATION
Key West
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C.Lookout
C.Canaveral
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REFERENCES.

‖—‖—‖—‖—	Rivers having	less than 3 feet of Water.
o—o—o—o—	" "	3 feet and less than 5 feet.
×—×—×—×—	" "	5 feet to 6 feet inclusive.
>—>—>—>—	" "	6 feet of Water and over.

Head of Navigation.

Slack-Water Navigation and Canals.

The red lines running from port to port on the coasts and lakes, show the principal transportation routes, but must not be taken to indicate the correct sailing tracks.

ENGRAVED BY U.S.G.S.

Scale

100 50 25 0 50 100 200 300 STAT. MILES

LITH BY A HOEN & CO BALTIMORE MD

TRANSPORTATION ON THE ATLANTIC COAST AND GULF OF MEXICO.

TRANSPORTATION ON THE ATLANTIC COAST AND GULF OF MEXICO.

BY THOMAS J. VIVIAN.

The statistics given in the present report are those concerning transportation on water by craft owned and registered in the seaports of the Atlantic coast and Gulf of Mexico and the ports situated on the navigable rivers emptying into these bodies of water, except the Mississippi river, whose traffic, with that of its affluents, is reported separately, the only portion of the Mississippi river traffic embraced in this report being the ocean trade to and from New Orleans.

For the presentation of these statistics 39 tables have been prepared, their respective numbers and titles being as follows:

PLAN OF THE TABLES.

Equipment, occupation, and construction:
- Table 1.—Equipment of fleets in general.
- Table 2.—Equipment of fleets by classified tonnage.
- Table 3.—Equipment of fleets by classified occupations.
- Table 4.—Ownership by classes.
- Table 5.—Ownership by localities.
- Table 6.—Construction by classes.
- Table 7.—Construction by localities.

Traffic operations:
- Table 8.—Traffic in general.
- Table 9.—Freight traffic by commodities.
- Table 10.—Interdistrict movement, freight, and mileage.

Earnings and expenses:
- Table 11.—Financial account in general.
- Table 12.—Running and shore expenses.
- Table 13.—Employés and wages by coast totals.
- Table 14.—Employés and wages in detail.

General operations by classes:
- Table 15.—Passenger and freight vessels.
- Table 16.—Ferryboats.
- Table 17.—Towing boats.
- Table 18.—Yachts.
- Table 19.—Harbor craft.
- Table 20.—Miscellaneous craft.
- Table 21.—No traffic report.
- Table 22.—Summary.

Fuel account:
- Table 23.—Amount and value of coal and wood used.

Comparative statistics:
- Table 24.—Steamers in 1880 and 1889.
- Table 25.—Gross earnings and wages of steamers in 1880 and 1889.
- Table 26.—Steamers' crews and wages in 1880 and 1889.
- Table 27.—Steamer traffic in 1880 and 1889.
- Table 28.—Fleets for the 10 years 1880–1889.
- Table 29.—Aggregates and averages for the 10 years 1880–1889 (all vessels).
- Table 30.—Aggregates and averages for the 10 years 1880–1889 (steamers).
- Table 31.—Aggregates and averages for the 10 years 1880–1889 (sailing vessels).
- Table 32.—Aggregates and averages for the 10 years 1880–1889 (unrigged craft).
- Table 33.—Tonnage fluctuations for the 10 years 1880–1889 (all vessels).
- Table 34.—Tonnage fluctuations for the 10 years 1880–1889 (steamers).
- Table 35.—Tonnage fluctuations for the 10 years 1880–1889 (sailing vessels).
- Table 36.—Tonnage fluctuations for the 10 years 1880–1889 (unrigged craft).
- Table 37.—Shipbuilding for the 10 years 1880–1889 (all vessels).
- Table 38.—Shipbuilding for the 10 years 1880–1889 (steamers).

Congressional appropriations:
- Table 39.—Appropriations for the Atlantic coast and Gulf of Mexico, by localities.

LOCALITIES OF REGISTRATION, EQUIPMENT, AND TRAFFIC.

For convenience the ports whose fleets are reported have been grouped, numbered, and named according to the plan on the following page.

NAMES, PORTS, AND BOUNDARY LINES OF THE EQUIPMENT AND TRAFFIC DISTRICTS IN WHICH THE FLOATING CRAFT OF THE ATLANTIC COAST AND GULF OF MEXICO ARE REGISTERED.

Number of district.	Name of district.	Ports.	Boundary line.
1	Portland	Eastport, Lubeck, Machias, Calais, Franklin, Castine, Buckport, Sedgwick, Mount Desert Ferry, Deer Isle, Southwest Harbor, Sullivan, Ellsworth, Belfast, Lincolnville, Searsport, Bangor, St. George, Thomaston, Rockland, North Haven, Camden, Rockport, Boothbay, Wiscasset, Waldoboro, Damariscotta, Bath, Portland, York, Kennebunk, and Saco, Me. Portsmouth, N. H.	Maine and New Hampshire.
2	Boston	Salem, Marblehead, Newburyport, Gloucester, Boston, Plymouth, Duxbury, Scituate, Falmouth, Provincetown, Dennis, West Dennis, South Dennis, Chatham, Wellfleet, Barnstable, Hyannis, Edgartown, Nantucket, Fall River, and New Bedford, Mass. Bristol, Newport, and Providence, R. I.	Massachusetts and Rhode Island.
3	New York	New London, Stonington, New Haven, Bridgeport, and Hartford, Conn. Patchogue, New York, Cold Spring Harbor, Albany, Port Jefferson, Greenport, and Sag Harbor, N. Y. Newark and Perth Amboy, N. J.	Rhode Island line to and including Cape May, N. J.
4	Philadelphia	Tuckerton, Somers Point, Bridgeton, Camden, Burlington, and Trenton, N. J. Philadelphia, Pa. Wilmington, Milford, Seaford, and New Castle, Del. Chincoteague, Va.	Cape May, N. J., to Cape Charles, Va.
5	Baltimore	Baltimore, Crisfield, and Annapolis, Md. Georgetown, D. C. Onancock, Cape Charles, and Alexandria, Va.	Including Cape Charles, Va., to and including Potomac river.
6	Norfolk	Norfolk, Newport News, Petersburg, Richmond, and Tappahannock, Va. Edenton, Newbern, Beaufort, and Wilmington, N. C.	Potomac river to route line of North Carolina.
7	Savannah	Georgetown, Charleston, and Beaufort, S. C. Savannah, Brunswick, and St. Mary, Ga. Fernandina, Jacksonville, St. Augustine, and Key West, Fla.	South Carolina to and including Key West, Fla.
8	Mobile	Tampa, Cedar Keys, Apalachicola, and Pensacola, Fla. Mobile, Ala. Shieldsboro, Miss	Key West, Fla., to Louisiana.
9	New Orleans	New Orleans, Brashear, and Lake Charles, La	Louisiana.
10	Galveston	Galveston, Corpus Christi, Brownsville, and Eagle Pass, Tex	Texas.
11	Pacific coast	All seaports on the United States Pacific coast.	
12	Foreign	The ports of call and trading points in all foreign countries.	

To the first 10 districts the statistics of number, tonnage, valuation, construction, ownership, occupation, employés, wages, earnings, expenses, and passengers and freight carried have been assigned, while the interdistrict statistics of commodities and mileage have been assigned to all 12 districts.

EQUIPMENT AND OCCUPATION.

The 7 tables, 1 to 7, inclusive, present the main facts concerning the number, carrying capacity, valuation, and occupation or pursuit of the entire floating equipment of the Atlantic coast and Gulf of Mexico, with the exception of craft engaged as fishing vessels. The minimum tonnage limit of the steamers, sailing vessels, and unrigged craft for registry is 5 tons. The unregistered part of the fleet is unrigged, whose registration was not compulsory after 1882, except for those barges engaged in the transportation of bonded goods.

The steamers are classed as passenger and freight, towing, ferry, yachts, harbor, miscellaneous, and no traffic report. The sailing vessels are classed as freight, harbor, yachts, miscellaneous, and no traffic report. The unrigged embrace all craft engaged in the transportation of freight and having no motive power of their own. The passenger and freight vessels, both steam and sail, are those engaged exclusively in either passenger or freight traffic or in combined passenger and freight traffic, but does not include ferryboats, which are treated as a separate class. The towing steamers are those furnishing motive power for floats and barges, or for the moving of vessels without and within the harbor. The yachts include all pleasure craft above the registration limit. The harbor craft placed among the steamers include such floating channel property as dredges, wreckers, iceboats, pile-drivers, and lighters used in the loading or unloading of large vessels, already reported as freighters. The harbor craft placed among the sailing vessels include water boats, pilot boats, and lighters engaged in the loading or unloading of large vessels, already reported as freighters. The miscellaneous, both sail and steam, are such craft as were engaged in more than one class of occupation during the year. The craft grouped under the head of "No traffic report" are the steamers and sailing vessels which were not operated during the year, or which failed to make the required report of operations. In Table 1 the number, tonnage, and valuation of all craft are accredited to each of the various ports comprising the districts; while in Table 2 the steamers and sailing vessels of the fleet are classified according to tonnage, the classifications ranging from "5 to 50 tons" up to "2,500 tons and over". In Table 3 the entire fleet is classified according to occupation and allotted to the various districts. The figures given in this table and Table 1 show that the total fleet, with the exception of craft employed as fishing vessels, of the Atlantic coast and Gulf of Mexico numbered 13,466 craft, having a tonnage of 2,862,630 tons, and a valuation of $127,676,487. The tonnage figures employed represent gross tonnage, and the valuation is the estimated commercial valuation reported in the schedules as having been set by the owners of the vessels on the last day of 1889.

Table A.—SUMMARY SHOWING THE NUMBER, TONNAGE, AND VALUATION OF THE PRINCIPAL CLASSES OF VESSELS REGISTERED AND OWNED ON THE ATLANTIC COAST AND GULF OF MEXICO IN 1889.

CLASSES OF VESSELS.	Number.	Tonnage.	Valuation.
Total	13, 466	2, 862, 630	$127, 676, 487
Steamers	2, 933	837, 162	73, 554, 540
Passenger and freight	810	487, 939	36, 989, 280
Towing	1, 095	61, 359	10, 203, 330
Ferry	214	98, 174	7, 907, 700
Yachts	170	11, 328	3, 520, 610
Harbor	94	13, 843	1, 446, 150
Miscellaneous	153	69, 127	5, 451, 570
No traffic report	397	95, 392	8, 035, 900
Sailing vessels	7, 108	1, 401, 985	46, 284, 507
Freight	5, 229	1, 260, 362	38, 777, 627
Harbor	368	15, 849	1, 151, 540
Yachts	628	14, 428	2, 681, 455
Miscellaneous	52	2, 553	75, 360
No traffic report	831	108, 793	3, 598, 525
Unrigged craft	3, 425	623, 483	7, 837, 440

Table 3 contains material from which have been derived the average tonnage, average commercial value per craft, and average value per ton of the entire fleet, and in the following summary these averages will be found for each class:

Table B.—SUMMARY SHOWING THE NUMBER, AVERAGE TONNAGE, AVERAGE VALUE PER VESSEL, AND AVERAGE VALUE PER TON OF THE PRINCIPAL CLASSES OF VESSELS OWNED ON THE ATLANTIC COAST AND GULF OF MEXICO IN 1889.

CLASSES OF VESSELS.	Number of vessels.	Average tonnage.	Average commercial value per craft.	Average value per ton.
Total	13, 466	213	$9, 481	$44. 60
Steamers	2, 933	285	25, 078	87. 86
Passenger and freight	810	602	45, 666	75. 81
Towing	1, 095	56	9, 318	166. 29
Ferry	214	459	36, 952	80. 55
Yachts	170	67	20, 700	310. 79
Harbor	94	147	15, 385	104. 47
Miscellaneous	153	452	35, 631	78. 86
No traffic report	397	240	20, 242	84. 24
Sailing vessels	7, 108	197	6, 512	33. 01
Freight	5, 229	241	7, 416	30. 77
Harbor	368	43	3, 129	72. 66
Yachts	628	23	4, 270	185. 85
Miscellaneous	52	49	1, 449	29. 52
No traffic report	831	131	4, 330	33. 08
Unrigged craft	3, 425	182	2, 288	12. 57

It will be seen that the average value per ton is nearly in due inverse ratio to the average tonnage. Thus the towing steamers and steam yachts have the lowest average tonnage and the highest value per ton, while the passenger and freight steamers have the highest average tonnage and the lowest average value per ton. The same ratio will be found in the sailing vessels, the yachts having the lowest average tonnage and the highest average value per ton and the freight vessels having the highest tonnage and the lowest average value per ton. The rule does not apply, however, to the relative averages of the steamers and sailing vessels engaged in the same calling. In the case of the passenger and freight steamers and freight sailing vessels, for instance, the steamers have the higher average tonnage and the higher average value per ton, the larger value of the steamers being due to the presence of machinery and more expensive material of construction.

OWNERSHIP AND CONSTRUCTION.

Tables 4 to 7, inclusive, deal with the facts of the ownership and construction of the various classes of steamers and sailing vessels, no classification of either ownership or construction having been made for the unrigged. The statistics of ownership are given for only 9,151 steamers and sailing vessels.

Table 4, entitled "Ownership by classes", and Table 5, entitled "Ownership by localities", are respectively summarized in the two parts of the subjoined statement:

Table C.—SUMMARY SHOWING THE NUMBER, TONNAGE, AND VALUE FOR EACH CLASS OF VESSELS AND FOR EACH DISTRICT OF THE ATLANTIC COAST AND GULF OF MEXICO, GROUPED UNDER THE HEADS OF INDIVIDUAL, JOINT STOCK, AND CORPORATE OWNERSHIP.

BY CLASSES.

CLASSES OF VESSELS AND DISTRICTS.	Total number of vessels.	NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
		Individual.		Joint stock.		Corporate.		Individual.	Joint stock.	Corporate.
		Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
Total	9,151	7,904	1,404,883	215	75,827	1,032	580,613	$60,509,762	$5,250,750	$43,768,790
Steamers	2,626	1,548	156,974	148	46,488	930	555,115	18,905,530	4,255,700	43,284,910
Passenger and freight	810	324	62,510	82	38,143	404	387,286	5,371,470	3,284,000	28,333,810
Towing	1,095	796	35,818	38	2,795	261	22,746	6,154,300	384,000	3,665,030
Ferry	214	63	26,945	13	3,806	138	67,423	2,315,970	375,000	5,216,730
Yachts	170	160	10,840	1	6	9	482	3,390,920	1,200	128,490
Harbor	94	51	4,650	8	1,121	35	8,072	456,650	117,000	872,500
Miscellaneous	153	82	9,239	1	214	70	59,674	730,220	45,000	4,676,350
No traffic report	90	72	6,972	5	403	13	9,432	486,000	49,500	392,000
Sailing vessels	6,525	6,356	1,247,909	67	29,339	102	25,498	41,604,232	995,050	483,880
Freight	5,229	5,124	1,209,053	48	28,181	57	23,128	37,423,227	937,350	417,050
Harbor	368	332	14,176	15	884	21	789	1,072,790	47,300	31,450
Yachts	628	626	14,406	1	10	1	12	2,678,955	500	2,000
Miscellaneous	52	28	941	1	43	23	1,569	37,980	4,000	33,380
No traffic report	248	246	9,333	2	221	....	....	391,280	5,900	....
BY DISTRICTS.										
Total	9,151	7,904	1,404,883	215	75,827	1,032	580,613	60,509,762	5,250,750	43,768,790
Steamers	2,626	1,548	156,974	148	46,488	930	555,115	18,905,530	4,255,700	43,284,910
Portland	122	55	3,006	19	1,815	48	20,665	336,250	240,500	1,777,500
Boston	233	106	9,723	3	75	124	90,572	1,213,150	13,000	7,041,880
New York	1,265	757	90,349	77	32,897	431	272,657	11,128,730	3,228,500	22,729,930
Philadelphia	302	161	12,641	11	1,319	130	67,031	1,665,350	185,200	5,635,100
Baltimore	215	126	12,577	15	5,935	74	51,557	2,306,800	250,000	2,537,750
Norfolk	132	90	5,597	7	1,535	35	4,856	497,800	104,500	386,800
Savannah	163	119	9,592	5	1,953	39	20,663	802,400	67,500	1,645,250
Mobile	106	81	8,489	6	472	19	1,210	618,250	53,500	129,200
New Orleans	53	31	3,614	4	410	18	24,872	209,800	58,000	1,287,000
Galveston	35	22	1,386	1	77	12	1,032	127,000	15,000	114,500
Sailing vessels	6,525	6,356	1,247,909	67	29,339	102	25,498	41,604,232	995,050	483,880
Portland	1,591	1,565	413,312	22	18,718	4	571	12,278,167	687,600	17,900
Boston	887	858	274,785	....	....	29	17,667	8,947,405	....	280,200
New York	1,893	1,823	355,060	29	9,249	41	3,481	12,946,835	245,950	90,730
Philadelphia	659	641	139,809	3	117	15	2,473	4,815,730	8,200	40,500
Baltimore	486	484	38,578	1	215	1	42	1,382,960	6,000	3,000
Norfolk	211	208	7,037	1	64	2	409	297,260	1,000	12,500
Savannah	257	256	7,821	1	10	....	....	391,800	500	....
Mobile	200	185	5,092	8	867	7	805	239,310	43,300	33,750
New Orleans	187	186	3,752	1	55	....	....	169,460	900	....
Galveston	154	150	2,663	1	44	3	50	135,305	1,600	5,300

In the preceding table it is seen that the preponderance of interest lies with the individual owner. The steamers owned by corporations numbered 930, with a tonnage of 555,115 tons and a valuation of $43,284,910, while the steamers owned by individuals numbered 1,548, with a tonnage of 156,974 tons and a valuation of $18,905,530. The sailing vessels owned by corporations numbered 102, with a tonnage of 25,498 tons and a valuation of $483,880, while the sailing vessels owned by individuals numbered 6,356, with a tonnage of 1,247,909 tons and a valuation of $41,604,232. The segregations of the figures of ownership, according to localities, display only one district, that of Boston, possessing a preponderance of steamers owned by corporations over those owned by individuals, the returns for this district giving 106 steamers owned by individuals against 124 owned by corporations. Portland and New York have the two largest numbers of sailing vessels owned by individuals, while Boston, New York, and Philadelphia are practically the only districts in which sailing vessels owned by corporations appear on the register. In the columns of valuation, it is shown that the valuation of the vessels owned by corporations was $43,768,790, while that of the vessels owned by individuals and joint stock companies amounted to $65,760,512.

The averages of tonnage derived from Table C may be summarized as follows:

TABLE **D.**—SUMMARY SHOWING AVERAGE TONNAGE OF STEAMERS AND SAILING VESSELS OF THE ATLANTIC COAST AND GULF OF MEXICO OWNED BY INDIVIDUALS, JOINT STOCK COMPANIES, AND CORPORATIONS.

CLASSES OF VESSELS.	AVERAGE TONNAGE PER VESSEL BY OWNERSHIP.		
	Individual.	Joint stock.	Corporation.
Steamers and sailing vessels	178	353	563
Steamers	101	314	597
Sailing vessels	196	438	250

CONSTRUCTION.

Tables 6 and 7 present the statistics of construction, and correspond in the plan of their presentation with Tables 4 and 5. In Table 6 the figures showing the number, tonnage, and value of vessels built of wood, composite, or of iron and steel are assigned to each class of steamers and sailing vessels, while in Table 7 the same figures are assigned to the various districts.

Table 6, entitled "Construction by classes", and Table 7, entitled "Construction by localities", are respectively summarized in the two parts of the subjoined table:

TABLE **E.**—SUMMARY SHOWING THE NUMBER, TONNAGE, AND VALUATION FOR EACH CLASS OF VESSELS AND FOR EACH DISTRICT OF THE ATLANTIC COAST AND GULF OF MEXICO, GROUPED UNDER THE HEADS OF MATERIALS OF CONSTRUCTION.

BY CLASSES.

CLASSES OF VESSELS.	NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.		
	Wood.		Composite.		Iron and steel.		Wood.	Composite.	Iron and steel.
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
Total	9,477	1,801,088	90	24,604	474	413,455	$80,915,897	$1,183,120	$37,740,030
Steamers	2,448	427,560	24	5,365	461	404,237	35,991,510	547,800	37,015,230
Passenger and freight	612	229,165	10	4,317	188	254,457	14,988,470	280,000	21,720,810
Towing	986	52,535	6	236	103	8,588	8,554,730	21,800	1,626,800
Ferry	155	57,664	...	...	59	40,510	3,971,200	...	3,936,500
Yachts	142	6,111	3	353	25	4,864	1,735,890	135,000	1,649,720
Harbor	86	11,302	...	...	8	2,541	1,146,150	...	300,000
Miscellaneous	110	24,563	5	459	38	44,105	1,677,170	111,000	3,663,400
No traffic report	357	46,220	...	...	40	49,172	3,917,900	...	4,118,000
Sailing vessels	7,029	1,373,528	66	19,239	13	9,218	44,924,387	635,320	724,800
Freight	5,163	1,232,597	59	19,028	7	8,737	37,658,057	605,070	514,500
Harbor	365	15,753	3	96	...	...	1,145,790	5,750	...
Yachts	619	13,875	3	72	6	481	2,450,655	20,500	210,300
Miscellaneous	51	2,510	1	43	...	...	71,360	4,000	...
No traffic report	831	108,793	...	...	...	...	3,598,525	...	...

TABLE E.—SUMMARY SHOWING THE NUMBER, TONNAGE, AND VALUATION FOR EACH CLASS OF VESSELS AND FOR EACH DISTRICT OF THE ATLANTIC COAST AND GULF OF MEXICO, GROUPED UNDER THE HEADS OF MATERIALS OF CONSTRUCTION—Continued.

BY DISTRICTS.

DISTRICTS.	NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.		
	Wood.		Composite.		Iron and steel.		Wood.	Composite.	Iron and steel.
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
Total	9,477	1,801,088	90	24,604	474	413,455	$80,915,897	$1,183,120	$37,740,030
Steamers	2,448	427,560	24	5,365	461	404,237	35,991,510	547,800	37,015,230
Portland	134	26,408	......	......	1	510	2,461,150	......	50,000
Boston	248	68,510	......	......	27	39,780	4,937,930	......	4,095,200
New York	1,166	213,279	12	2,356	198	227,236	19,077,330	308,300	21,587,430
Philadelphia	250	40,622	3	988	102	49,455	3,640,150	80,000	4,872,100
Baltimore	172	33,189	4	1,311	53	37,256	2,323,350	117,500	2,914,200
Norfolk	134	10,168	4	240	16	3,142	833,600	27,000	309,000
Savannah	161	18,278	1	470	27	18,373	1,405,350	15,000	1,538,500
Mobile	113	10,291	......	......	13	1,122	769,250	......	198,500
New Orleans	34	4,260	......	......	22	27,147	294,900	......	1,417,800
Galveston	36	2,555	......	......	2	216	248,500	......	32,500
Sailing vessels	7,029	1,373,528	66	19,239	13	9,218	44,924,387	635,320	724,800
Portland	1,640	447,704	37	11,437	1	1,448	13,519,752	303,670	55,000
Boston	969	311,202	8	3,618	......	......	9,814,825	132,400	......
New York	1,999	396,108	9	1,237	9	5,359	13,737,455	64,050	530,300
Philadelphia	694	142,425	8	2,813	3	2,411	4,773,500	125,200	139,500
Baltimore	532	40,464	1	71	......	......	1,462,060	4,000	......
Norfolk	284	9,966	2	41	......	......	411,260	2,500	......
Savannah	299	8,432	......	......	......	......	420,925	......	......
Mobile	242	9,649	1	22	......	......	425,660	3,500	......
New Orleans	214	4,247	......	......	......	......	194,360	......	......
Galveston	156	3,331	......	......	......	......	164,590	......	......

It will be seen from the preceding table that in vessels of the Atlantic coast and Gulf of Mexico wood still continues to be the principal material, even in steamers. Some of the reasons for this are indicated in the following table, which shows the relative average value per ton of vessels built of the materials under consideration:

TABLE F.—SUMMARY SHOWING AVERAGE TONNAGE AND AVERAGE VALUE PER TON OF THE VESSELS OF THE ATLANTIC COAST AND GULF OF MEXICO CONSTRUCTED OF WOOD, COMPOSITE, AND IRON AND STEEL.

CLASSES OF VESSELS.	MATERIALS OF CONSTRUCTION.					
	Wood.		Composite.		Iron and steel.	
	Average tonnage.	Average value per ton.	Average tonnage.	Average value per ton.	Average tonnage.	Average value per ton.
Steamers and sailing vessels	190	$44.93	273	$48.09	872	$91.28
Steamers	175	84.18	224	102.11	877	91.57
Sailing vessels	195	32.71	292	33.02	709	78.63

This table shows that while the average value per ton of steamers built of wood is $84.18, the average value of steamers built of iron and steel is $91.57; and that while the average value per ton of the wooden sailing vessels is $32.71, that of the iron and steel sailing vessels is $78.63, or considerably more than twice as much per ton. The high average value per ton of composite built steamers is due to the fact that in this class of construction there are included the extremely expensive yachts registered in the Atlantic ports. One of the features of this table of averages is, that it shows an increasing figure in the average tonnage of iron and steel vessels over those of composite build, which vessels, in their turn, are of a higher average tonnage than those built of wood; the figures being 190 tons as the average of wooden vessels, 273 tons as the average of composite vessels, and 872 tons as the average of iron and steel vessels.

TRAFFIC OPERATIONS.

Tables 8, 9, and 10, constituting the report on traffic operations, and Tables 11, 12, 13, and 14, constituting the report of earnings and expenses, deal only with the steamers classified as passenger and freight steamers, with the sailing vessels classified as freighters, and the unrigged, which were moved by the steamers.

In this connection it is to be observed that the reports by districts show all commercial transactions, including receipts and shipments, correctly for each district taken alone. When these districts are combined into a total, it will be evident that freight sent from one district to another will appear as a shipment in one case and as a receipt in the other; and when tables for districts transacting business with each other are added, this will duplicate the freight and the mileage involved.

This brings into the tables formed by adding all districts a duplication of 27,983,541 tons, representing freight which appears as shipments in one district and as receipts in another district, and the mileage is duplicated in a corresponding manner to the extent of 28,560,040 miles.

The following table exhibits the freight and the mileage covered in such a way as to show commodities and mileage, stripped of all duplications. This explanation applies to all the tables and text where freight traffic and mileage are under discussion in which districts have been combined.

TABLE G.—TONS OF FREIGHT MOVED AND MILES COVERED BY THE PASSENGER AND FREIGHT CARRYING VESSELS, EXCLUSIVE OF FERRYBOATS, OF THE ATLANTIC COAST AND GULF OF MEXICO.

DISTRICTS.	COMMODITIES.							Miles covered.
	Total.	Coal.	Lumber.	Stone.	Ice.	Cement, brick, and lime.	All other commodities.	
Total	52, 712. 124	14, 210, 581	6, 038, 278	1, 453, 953	2, 692, 873	3, 469, 990	24, 846, 449	44, 566, 298
Portland	3, 597, 829	10, 966	1, 072, 705	440, 020	1, 194, 122	344, 210	535, 806	5, 143, 854
Boston	2, 532, 507	17, 897	85, 705	330, 306	115, 989	21, 890	1, 960, 720	3, 142. 024
New York	27, 843, 398	9, 280, 639	487, 954	568, 588	1, 355, 373	2, 999, 868	13, 150, 976	16, 114, 461
Philadelphia	4, 674, 715	1, 495, 740	1, 197, 953	17, 892	14, 261	36, 409	1, 912, 460	3, 938. 867
Baltimore	3, 873, 633	1, 924, 458	77, 485	57, 908	4, 533	17, 363	1, 791, 886	4, 204, 352
Norfolk	3, 730, 782	1, 447, 934	664, 322	9, 291	2, 160	5, 920	1, 601, 155	3, 063, 280
Savannah	4, 186, 745	2, 498	1, 466, 779	13	2, 695	6, 007	2. 708, 753	5, 362, 458
Mobile	919, 721	20, 825	535, 754	6. 741	3, 433	5, 320	347, 648	1, 879, 244
New Orleans	901, 625	3, 580	415, 128	1, 974	299	12, 955	467, 689	821, 236
Galveston	451, 169	6, 044	34, 493	21, 220	8	20, 048	369, 356	896. 522

This table represents the actual commodities moved and the mileage covered by the vessels required to carry them, both as a total and by districts, and is made up as follows from the data exhibited in Table 10: each district is credited with the tonnage shipped from any port therein to another port in the same, with all freight shipped out of the district and with all freight shipped into the district from ports on the Pacific coast or from foreign ports. An additional tonnage, 233,083 tons, is credited to the district of New York, on account of freight carried by vessels belonging to that district, the freight being in transit between foreign ports.

From Table 8 it will be seen that the traffic of the Atlantic coast and Gulf of Mexico trading fleet amounted during the year of report to 80,695,665 tons of freight and 11,581,446 passengers. Of the freight, 28,791,438 tons were carried on steamers and 12,102,694 on unrigged craft towed by steamers, the remaining 39,801,533 tons being carried on sailing vessels.

DETAILS OF COMMODITIES.

An analysis of the 80,695,665 tons of freight carried by the passenger and freight carrying vessels of the Atlantic coast and Gulf of Mexico is given in Table 9. The commodities on which specific returns were secured are coal, lumber, stone, ice, cement, brick, and lime, the respective amounts being as follows:

	TONS.
Total	44, 831, 271
Coal	23, 775, 938
Lumber	10, 887, 627
Stone	1, 991, 848
Ice	4, 026, 499
Cement, brick, and lime	4,149, 359

The other commodities make up an unspecified total of 35,864,394 tons.

INTERDISTRICT TRAFFIC.

The same gross amount of tons of freight of the specified commodities given in Table 9 is used in Table 10, which presents the interdistrict traffic. By the arrangement followed in the latter table there can be seen how much freight was brought into any one district from any other district, how much was taken out of it, and what was its destination. It will be seen, for example, that the shipments from New York to Portland amounted to 1,315,246 tons; from New York to Boston, 4,410,588 tons; from New York to Philadelphia, 163,005 tons; from New York to Baltimore, 100,583 tons; from New York to Norfolk, 422,329 tons; from New York to Savannah, 567,141 tons; from New York to Mobile, 17,553 tons; from New York to New Orleans, 12,653 tons; from New York to Galveston, 186,666 tons; from New York to the Pacific coast, 171,985 tons; from New York to foreign, 1,107,142 tons; that within the district there was an internal or local movement of 17,817,212 tons, and that from all other districts there were brought into the district of New York 6,421,107 tons, making the total trade of the New York district 32,713,210 tons. A column is given showing the number of miles covered in the movement of these respective amounts of freight.

The principal facts concerning the freight movement are given in the subjoined summary:

TABLE **H.**—SUMMARY SHOWING THE AMOUNT OF FREIGHT MOVED AND MILES TRAVELED BY THE PASSENGER AND FREIGHT CARRYING VESSELS OF THE ATLANTIC COAST AND GULF OF MEXICO IN THE VARIOUS TRAFFIC DISTRICTS.

DISTRICTS.	Tons of freight moved.	Number of miles traveled.
Total	80, 695, 665	73, 126, 338
Portland	5, 988, 284	7, 256, 508
Boston	11, 990, 935	9, 995, 795
New York	32, 713, 210	19. 777, 154
Philadelphia	6, 418, 448	5, 415, 689
Baltimore	5. 608, 839	5, 838, 703
Norfolk	5, 075, 198	4, 355, 895
Savannah	5, 769, 609	7, 181, 705
Mobile	1, 003, 821	2, 081, 010
New Orleans	1, 144, 754	1, 288, 269
Galveston	717, 381	1, 629, 890
Pacific coast	307, 597	561, 970
Foreign	3, 957, 589	7, 743, 750

A large amount of the freight traffic reported on was internal; that is, it was carried on within the 10 coast districts by vessels trading either from port to port embraced in each district or on local waters. This amount of internal traffic is shown in the following summary:

TABLE **I.**—SUMMARY SHOWING THE AMOUNT OF FREIGHT MOVED AND MILES TRAVELED IN THE INTERNAL TRAFFIC OF THE 10 DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO.

DISTRICTS.	Tons of freight moved.	Number of miles traveled.
Total	24, 495, 500	14, 526, 768
Portland	483, 689	1, 085, 833
Boston	465, 815	643, 670
New York	17, 817, 212	5, 571, 914
Philadelphia	938, 024	1, 034, 634
Baltimore	899, 656	1, 580, 938
Norfolk	731, 767	453, 565
Savannah	1, 630, 146	2, 150, 060
Mobile	488, 341	1, 034, 080
New Orleans	788, 503	539, 514
Galveston	252, 347	432, 560

EARNINGS AND EXPENSES.

The figures which are given in Table 11 show the income and expense account of the freighting vessels of the Atlantic coast and Gulf of Mexico for the year ending December 31, 1889. They are given under the heads of "Gross earnings", "Expenses", and "Net earnings", and for steamers, sailing vessels, and unrigged craft allotted to districts. The totals for all the ports embraced in these districts show that the gross earnings of the whole operating fleet amounted to $70,843,633 and the expenses to $54,080,214, leaving the net earnings at $16,763,419. The relative earnings and expenses of steamers, sailing vessels, and unrigged craft are shown in the summary on the following page.

TABLE J.—SUMMARY SHOWING THE TOTAL EARNINGS, EXPENSES, AND NET EARNINGS OF THE PASSENGER AND FREIGHT CARRYING VESSELS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE YEAR ENDING DECEMBER 31, 1889.

CLASSES OF VESSELS.	Gross earnings.	Expenses.	Net earnings.
Total	$70,843,633	$54,080,214	$16,763,419
Steamers	30,112,259	23,075,441	7,036,818
Sailing vessels	31,700,178	23,420,855	8,279,323
Unrigged craft	9,031,196	7,583,918	1,447,278

In Table 12 the expenses of the passenger and freight carrying vessels are divided into running and shore expenses, with the same classifications as occur in Table 11; that is, they are presented for steamers, sailing vessels, and unrigged, and for the districts of the Atlantic coast and Gulf of Mexico. The very large proportion of the whole expense which comes under the head of "Running expenses" is emphasized in this table, the figures showing that out of a total of $54,080,214 no less than $47,046,211 were running expenses. The relative running expenses of steamers and sailing vessels are clearly indicated in the subjoined summary:

TABLE K.—SUMMARY SHOWING THE AMOUNT OF RUNNING AND SHORE EXPENSES OF THE PASSENGER AND FREIGHT CARRYING VESSELS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE YEAR ENDING DECEMBER 31, 1889.

CLASSES OF VESSELS.	Total expenses.	Running expenses.	Shore expenses.
Total	$54,080,214	$47,046,211	$7,034,003
Steamers	23,075,441	19,448,817	3,626,624
Sailing vessels	23,420,855	21,120,368	2,300,487
Unrigged	7,583,918	6,477,026	1,106,892

EMPLOYÉS AND WAGES.

Out of the total of running expenses $16,333,338 were paid during the year as wages, as shown in Table 13. That table also shows that the total amount of wages paid on board the steamers was $5,868,525; on board sailing vessels, $8,419,657, and on board unrigged craft, $2,045,156. Table 14 shows the wages paid per month to every class of employés from captains to boys, together with the number of persons of each class employed during the month of report. This number of men constituted what is called the number making the ordinary crews of vessels.

GENERAL OPERATIONS.

The 8 tables, 15 to 22, inclusive, segregate the principal figures of equipment, traffic, and financial data into a separate table for each class of occupation; that is, they give all the available totals for passenger and freight vessels, ferryboats, towing boats, yachts, harbor craft, miscellaneous craft, and those making no traffic report, and a comprehensive summary.

From the information in these 8 tables 2 supplementary tables are drawn. The first presents the financial account of other vessels than those classified as passenger and freight; that is, of the ferryboats, towing boats, harbor craft, and miscellaneous craft, together with those of the passenger and freight carrying vessels, to make the total financial account of the operating fleet of the Atlantic coast and Gulf of Mexico.

TABLE L.—SUMMARY SHOWING THE GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF THE OPERATING FLEET OF THE ATLANTIC COAST AND GULF OF MEXICO.

CLASSES OF OCCUPATIONS.	Gross earnings.	Expenses.	Net earnings.
Total	$90,147,632	$70,226,792	$19,920,840
Passenger and freight	70,843,633	54,080,214	16,763,419
Ferryboats	5,392,969	4.568,238	824,731
Towing boats	10,131,921	8,526,733	1,605,188
Harbor craft	2,225,751	1,729,458	496,293
Miscellaneous craft	1,553,358	1,322,149	231,209

The second supplementary table contains separate statements of the employés and wages paid on ferryboats, towing boats, harbor craft, and miscellaneous craft, these facts being shown in the summary on the following page.

TABLE M.—SUMMARY SHOWING THE TOTAL WAGES PAID DURING THE YEAR TO THE TOTAL NUMBER OF MEN EMPLOYED ON THE PRINCIPAL OPERATING VESSELS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE YEAR 1889.

CLASSES OF OCCUPATIONS.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total wages paid during year.
Total	17,418	$21.38	63,625	$22,123,099
Passenger and freight	17,418	21.38	52,659	16,333,338
Ferryboats			1,710	1,276,847
Towing boats			6,152	3,042,066
Harbor craft			1,784	765,788
Miscellaneous craft			1,320	705,060

The number given in the column entitled "Ordinary crews" is the number required to work and officer the operating vessels reported for the different districts.

FUEL ACCOUNT.

The fuel account which is presented in Table 23 is made up from the itemized reports of all steamers; and from the summary, which is appended, it will be seen that their operations required the consumption of 2,298,418 tons of coal and 130,585 cords of wood. The cost of the coal was $7,512,650, or an average of $3.27 per ton, and that of the wood was $238,837, or an average cost of $1.83 per cord.

TABLE N.—SUMMARY SHOWING THE QUANTITIES OF COAL AND WOOD BURNED BY PASSENGER AND FREIGHT STEAMERS, FERRYBOATS, HARBOR CRAFT, AND STEAM YACHTS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE YEAR 1889.

DISTRICTS.	Coal. (Tons.)	Wood. (Cords.)
Total	2,298,418	130,585
Portland	74,619	325
Boston	320,385	
New York	1,239,822	4,838
Philadelphia	301,548	600
Baltimore	170,839	
Norfolk	33,291	16,430
Savannah	65,502	33,799
Mobile	13,023	60,051
New Orleans	74,890	8,997
Galveston	4,499	5,545

COMPARATIVE STATISTICS.

The 23 tables which have been considered present the statistics for the year ending December 31, 1889, while the 15 tables numbered from 24 to 38, inclusive, give the comparative statistics either for the 2 years 1880 and 1889 or for the 10 years 1880–1889, inclusive.

Tables 24 to 27, inclusive, deal only with the 2 years of report, 1880 and 1889, the information being the summarized reports on transportation for the Tenth and Eleventh Censuses, use being made only of such tables drawn from both reports as could be comparatively presented. The only branch of transportation on the Atlantic coast and Gulf of Mexico fully reported at the Tenth Census was that conducted by steamers. The distribution of the data, it will be seen, is by states, as that segregation was adopted in the Tenth Census, and the statistics are those simply of the number, tonnage, and value of all steamers, their gross earnings, the crews, the amount paid to them in wages, and the freight and passenger traffic. The total steamer fleet of the Atlantic coast and Gulf of Mexico in 1880 numbered 2,195, with a tonnage of 613,986.02, and a valuation of $45,394,700; the fleet in 1889 numbered 2,933, with a tonnage of 837,162, and a valuation of $73,554,540, the increase in number being 738, in tonnage being 223,175.98, and in valuation being $28,159,840. No balance of accounts was made in 1880, but the gross earnings of the steamers was $44,430,765, and as that of the steamers in 1889 was $48,003,020, it shows an increase of $3,572,255. The increase in traffic was still more noteworthy, the freight movement in 1880 being 9,505,944 tons, while in 1889 it amounted to 28,791,438 tons, exclusive of freight carried by ferryboats at both censuses; the passenger traffic, including ferry passengers, for 1880 was 152,784,517 persons, and in 1889, 170,225,458. Only in the subject of total wages paid do the figures for 1889 show a decrease as against those of 1880, for while the total wages paid to 24,910 men in 1880 was $12,964,874, in 1889, 25,653 men were paid but $11,239,169, which very clearly illustrates the difference in the scale of wages at the two dates. In 1880 the average annual wages per man on the steamers of the Atlantic coast and Gulf of Mexico was $520.47, but in 1889 the average annual wages on the same class of craft and in the same locality was but $438.12, a decrease of $82.35 in the annual average wages per man.

FLEETS FOR THE DECADE.

Tables 28 to 38, inclusive, deal with the fleets registered in the ports of the Atlantic coast and Gulf of Mexico during the 10 years 1880–1889, inclusive, and have been compiled from the reports of the Bureau of Navigation. They illustrate the changes in the number and tonnage of the registered steamers, sailing vessels, and unrigged craft, the fluctuations of tonnage, the averages of the tonnage of the vessels composing the fleet in each year, the accessions to the fleet by shipbuilding, and the methods of propulsion of the steamers built during the decade. These tables are summarized as follows:

TABLE **O.**—SUMMARY SHOWING THE NUMBER, TONNAGE, AND AVERAGE TONNAGE OF ALL VESSELS REGISTERED IN THE DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO FOR THE 10 YEARS 1880–1889, INCLUSIVE.

YEARS.	Number.	Tonnage.	Average tonnage.	YEARS.	Number.	Tonnage.	Average tonnage.
1880	17,484	2,657,349	152	1885	17,771	2,781,791	157
1881	17,589	2,652,319	151	1886	17,362	2,659,448	153
1882	17,897	2,714,281	152	1887	17,029	2,595,307	152
1883	17,856	2,770,017	155	1888	17,180	2,587,089	151
1884	17,922	2,819,586	157	1889	17,165	2,555,649	149

TABLE **P.**—SUMMARY SHOWING THE NUMBER, TONNAGE, AND AVERAGE TONNAGE OF ALL STEAMERS REGISTERED IN THE DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO FOR THE 10 YEARS 1880–1889, INCLUSIVE.

YEARS.	Number.	Tonnage.	Average tonnage.	YEARS.	Number.	Tonnage.	Average tonnage.
1880	2,251	631,302	280	1885	2,671	773,444	290
1881	2,364	644,204	273	1886	2,662	763,302	287
1882	2,532	692,959	274	1887	2,680	773,823	289
1883	2,584	730,308	283	1888	2,763	785,164	284
1884	2,693	755,754	281	1889	2,829	798,912	282

TABLE **Q.**—SUMMARY SHOWING THE NUMBER, TONNAGE, AND AVERAGE TONNAGE OF ALL SAILING VESSELS REGISTERED IN THE DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO FOR THE 10 YEARS 1880–1889, INCLUSIVE.

YEARS.	Number.	Tonnage.	Average tonnage.	YEARS.	Number.	Tonnage.	Average tonnage.
1880	14,609	1,912,800	131	1885	14,354	1,860,058	130
1881	14,576	1,884,739	129	1886	13,937	1,742,766	125
1882	14,593	1,876,736	129	1887	13,652	1,665,070	122
1883	14,500	1,889,438	130	1888	13,459	1,584,309	118
1884	14,489	1,918,006	132	1889	13,336	1,525,315	114

TABLE **R.**—SUMMARY SHOWING THE NUMBER, TONNAGE, AND AVERAGE TONNAGE OF ALL UNRIGGED CRAFT REGISTERED IN THE DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO FOR THE 10 YEARS 1880–1889, INCLUSIVE.

YEARS.	Number.	Tonnage.	Average tonnage.	YEARS.	Number.	Tonnage.	Average tonnage.
1880	624	113,247	181	1885	746	148,289	199
1881	649	123,376	190	1886	763	153,380	201
1882	772	144,586	187	1887	697	156,414	224
1883	772	150,271	195	1888	958	217,616	227
1884	740	145,826	197	1889	1,000	231,422	231

TABLE S.—SUMMARY SHOWING THE NUMBER, TONNAGE, AND AVERAGE TONNAGE OF THE STEAMERS AND SAILING VESSELS BUILT ON THE ATLANTIC COAST AND GULF OF MEXICO IN THE 10 YEARS 1880–1889, INCLUSIVE.

YEARS.	STEAMERS.			SAILING VESSELS.		
	Number.	Tonnage.	Average tonnage.	Number.	Tonnage.	Average tonnage.
Total for 10 years	1,610	418,684	260	4,562	618,705	136
1880	141	32,974	234	397	52,671	133
1881	185	41,394	224	406	60,890	150
1882	210	56,343	268	553	93,585	169
1883	189	65,078	344	631	119,060	189
1884	197	49,036	249	634	108,200	171
1885	155	44,017	284	465	59,332	128
1886	100	19,096	191	355	33,116	93
1887	123	38,972	317	371	24,252	65
1888	161	30,466	189	333	30,313	91
1889	149	41,308	277	417	37,281	89

TABLE T.—SUMMARY SHOWING THE NUMBER AND TONNAGE OF PROPELLERS AND SIDE-WHEEL AND STERN-WHEEL STEAMERS BUILT ON THE ATLANTIC COAST AND GULF OF MEXICO DURING THE 10 YEARS 1880–1889, INCLUSIVE.

YEARS.	METHODS OF PROPULSION.					
	Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total for 10 years	1,291	308,338	197	98,364	122	11,982
1880	103	23,964	29	8,076	9	934
1881	145	31,061	25	9,017	15	1,316
1882	160	38,601	27	16,622	14	1,120
1883	155	55,343	24	8,532	10	1,203
1884	169	42,479	11	4,328	17	2,229
1885	121	30,655	24	12,529	10	833
1886	85	12,809	8	5,929	7	358
1887	99	29,836	14	8,420	10	716
1888	128	17,601	18	11,231	15	1,634
1889	117	25,989	17	13,680	15	1,639

CONGRESSIONAL APPROPRIATIONS.

Table 39 gives the amount appropriated by Congress for the survey, improvement, and maintenance of the ports, harbors, and landings on the Atlantic coast and Gulf of Mexico and of the rivers flowing into them, from the date of the earliest appropriation to and including that of the act of Congress of September 19, 1890. The periods in which the appropriations are grouped are from the first appropriation up to and including 1879; from 1880 to 1889, inclusive; the appropriations in 1890, and the total appropriations from first to last. The localities improved under congressional aid number nearly 400, while the items of appropriation number nearly 1,500. It will be seen from this table that the earliest appropriation made by the government for river and harbor improvement on the Atlantic coast and Gulf of Mexico was in 1821, when, by the act of March 3, $150 was appropriated "For the purpose of enabling the Secretary of the Navy to remove obstructions placed in the river Thames in Connecticut by the commander of the American ships during the late war" (1812). Improvements of the coast waterways of Maine, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Pennsylvania, Virginia, North Carolina, Georgia, Florida, Alabama, and Mississippi were made between 1820 and 1830; those of New Hampshire, Maryland, District of Columbia, South Carolina, and Louisiana were commenced within the next 10 years, while improvements were begun in Texas very soon after its acquisition, $9,500 having been appropriated in 1852 for the survey of its harbors and the rivers emptying into the Gulf of Mexico. The state for which the largest amount of appropriations has been made is New York, with $9,285,568, the magnitude of this amount being largely due to the sums expended in the removal of obstructions in Hell Gate. The state which received the next largest amount of appropriations is Louisiana, with $8,579,136, nearly the whole of this amount having been expended in the improvements of the delta and passes of the Mississippi river. Texas, though the last to receive congressional aid, comes third in the amount so received, with $6,482,850, this amount being due to the sums expended on Galveston harbor and bay and on various "passes".

TABLE U.—SUMMARY SHOWING THE AMOUNTS APPROPRIATED BY CONGRESS FOR THE SURVEY, IMPROVEMENT, AND MAINTENANCE OF THE HARBORS AND RIVERS OF THE ATLANTIC COAST AND GULF OF MEXICO, GIVEN BY PERIODS AND ALLOTTED TO THE RESPECTIVE STATES FOR WHICH THE APPROPRIATIONS WERE MADE.

LOCALITIES.	Date of earliest appropriations.	Total appropriations up to date.	Appropriations up to and including 1879.	Appropriations for 1880-1889, inclusive.	Appropriations September 19, 1890.
Total	1821	$79, 582, 684	$37, 480, 428	$33, 293, 406	$8, 808, 850
Maine	1826	2, 490, 634	1, 305, 884	766, 250	418, 500
New Hampshire	1836	407, 500	105, 000	214, 500	88, 000
Massachusetts	1824	4, 833, 249	2, 657, 999	1, 668, 750	506, 500
Rhode Island	1827	1, 538, 950	577, 700	746, 250	215, 000
Connecticut	1821	2, 763, 327	1, 252, 777	1, 185, 550	325, 000
New York	1829	9, 285. 568	4, 304, 568	3, 881, 000	1, 100, 000
New Jersey	1829	1, 893, 038	551, 063	1, 166, 975	175, 000
Delaware	1822	4, 111, 265	3, 168, 665	814, 500	128, 100
Pennsylvania	1826	745, 850	351, 100	344, 750	50, 000
Maryland	1836	3, 513, 593	1, 355, 318	1, 750, 775	407, 500
District of Columbia	1833	2, 606, 500	501, 500	1, 825, 000	280, 000
Virginia	1829	3, 495, 380	1, 292, 580	1, 694, 800	508, 000
North Carolina	1826	4, 269, 309	1, 919, 059	1, 910, 250	440, 000
South Carolina	1836	3, 028, 000	550, 000	1, 895, 000	583, 000
Georgia (on the Atlantic)	1826	2, 918, 706	1, 120, 597	1, 285, 609	512, 500
Florida (on the Atlantic)	1829	1, 369, 070	146, 570	982, 000	240, 500
Florida (on the Gulf of Mexico)	1828	945, 280	230, 280	579, 500	135, 500
Georgia (*a*)	1874	27, 300	23, 300	4, 000	....
Alabama	1826	2, 647, 502	821, 752	1, 301, 750	524, 000
Mississippi	1827	447, 525	76, 400	311, 125	60, 000
Louisiana	1836	8, 579, 136	7, 767, 489	591, 647	220, 000
Texas	1852	6, 482, 850	1, 247, 200	4, 342, 500	893, 150
Miscellaneous (all states)	1828	6, 092, 450	1, 321, 500	3, 772, 350	998, 600
General appropriations (all states)	1841	5, 090, 702	4, 832, 127	258, 575	....

a Rivers emptying into other rivers which flow into the Gulf of Mexico.

EQUIPMENT, OCCUPATION, AND CONSTRUCTION.

TABLE 1.—EQUIPMENT OF FLEETS IN GENERAL—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT OF 5 TONS BURDEN AND OVER, REGISTERED OR OWNED IN THE PORTS OF THE ATLANTIC COAST AND GULF OF MEXICO, BY PORTS, WITH TOTALS FOR DISTRICTS.

SUMMARY.

DISTRICTS.	TOTAL OF ALL CRAFT.			STEAMERS.			SAILING VESSELS.			UNRIGGED CRAFT.		
	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.
Total	13, 466	2, 862, 630	$127, 676, 487	2, 933	837, 162	$73, 554, 540	7, 108	1, 401, 985	$46, 284, 507	3, 425	623, 483	$7, 837, 440
1. Portland	1, 968	504, 196	16, 587, 367	135	26, 918	2, 511, 150	1, 678	460, 589	13, 878, 422	155	16, 689	197, 795
2. Boston	1, 466	458, 806	19, 466, 030	275	108, 290	9, 033, 130	977	314, 820	9, 947, 225	214	35, 696	485, 675
3. New York	5, 205	1, 205, 684	60, 538, 535	1, 376	442, 871	40, 973, 060	2, 017	402, 704	14, 331, 805	1, 812	360, 100	5, 233, 670
4. Philadelphia	1, 556	382, 835	15, 051, 700	355	91, 065	8, 592, 250	705	147, 649	5, 038, 200	496	144, 121	1, 421, 250
5. Baltimore	922	138, 443	7, 046, 760	229	71, 756	5, 355, 050	533	40, 535	1, 466, 060	160	26, 152	225, 650
6. Norfolk	561	32, 077	1, 627, 025	154	13, 550	1, 169, 600	286	10, 007	413, 760	121	8, 520	43, 665
7. Savannah	780	63, 027	3, 507, 800	189	37, 121	2, 958, 850	299	8, 432	420, 925	292	17, 474	128, 025
8. Mobile	480	28, 847	1, 440, 220	126	11, 413	967, 750	243	9, 671	429, 160	111	7, 763	43, 310
9. New Orleans	283	36, 304	1, 910, 060	56	31, 407	1, 712, 700	214	4, 247	194, 360	13	650	3, 000
10. Galveston	245	12, 411	500, 990	38	2, 771	281, 000	156	3, 331	164, 590	51	6, 309	55, 400

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 1.—EQUIPMENT OF FLEETS IN GENERAL—Continued.

STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT.

DISTRICTS AND PORTS.	TOTAL OF ALL CRAFT.			STEAMERS.			SAILING VESSELS.			UNRIGGED CRAFT.		
	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.
Total	13, 466	2, 862, 630	$127, 676, 487	2, 933	837, 162	$73, 554, 540	7, 108	1, 401, 985	$46, 284, 507	3, 425	623, 483	$7, 837, 440
District 1—Portland	1, 968	504, 196	16, 587, 367	135	26, 918	2, 511, 150	1. 678	460, 589	13, 878, 422	155	16, 689	197, 795
Eastport, Me	52	10, 094	583, 635	12	4, 800	423, 500	40	5, 294	160, 135			
Lubeck, Me	15	1, 316	27, 820				15	1, 316	27, 820			
Machias, Me	206	30, 896	848, 540	3	80	11, 600	203	30, 816	836, 940			
Calais and Franklin, Me	75	9, 742	264, 185				75	9, 742	264, 185			
Castine, Me	58	3, 526	72, 500				58	3, 526	72, 500			
Buckport, Me	25	4, 040	111, 520				25	4, 040	111, 520			
Sedgwick, Me	23	1, 728	51, 380				23	1, 728	51, 380			
Mount Desert Ferry, Me	18	1, 255	20, 270				18	1, 255	20, 270			
Deer Isle, Me	45	4, 030	99, 000				45	4, 030	99, 000			
Southwest Harbor, Me	12	677	12, 350				12	677	12, 350			
Sullivan, Me	6	445	11, 000				6	445	11, 000			
Ellsworth, Me	125	11, 076	323, 550	15	823	123, 500	110	10, 253	200, 050			
Belfast and Lincolnville, Me	52	12, 879	352, 220				52	12, 879	352, 220			
Searsport, Me	26	17, 219	393, 265				26	17, 219	393, 265			
Bangor, Me	145	22, 309	653, 940	17	1, 694	153, 100	128	20, 615	500, 840			
St. George, Me	23	4, 396	127, 260				23	4, 396	127, 260			
Thomaston, Me	69	37, 939	1, 224, 235				69	37, 939	1, 224, 235			
Rockland, Me	148	25, 948	786, 265				148	25, 948	786, 265			
North Haven, Me	18	1, 346	56, 000				18	1, 346	56, 000			
Camden and Rockport, Me	54	23, 019	814, 190				54	23, 019	814, 190			
Boothbay, Me	32	1, 856	63, 300				32	1, 856	63, 300			
Wiscasset, Me	24	2, 499	61, 850	1	50	8, 300	23	2, 449	53, 550			
Waldoboro, Me	31	11, 907	436, 940	4	1, 661	133, 000	27	10, 246	303, 940			
Damariscotta, Me	30	8, 343	277, 030				30	8, 343	277, 030			
Bath, Me	240	147, 673	5, 503, 672	34	6, 577	727, 400	206	141, 096	4, 776, 272			
Portland, Me	196	78, 061	2, 713, 630	39	10, 768	874, 600	157	67, 293	1, 839, 030			
York, Me	4	197	4, 300				4	197	4, 300			
Kennebunk, Me	9	2, 315	77, 380	1	26	3, 750	8	2, 289	73, 630			
Saco, Me	11	2, 134	53, 265	1	43	5, 000	10	2, 091	48, 265			
Portsmouth, N. H	41	8, 642	365, 080	8	396	47, 400	33	8, 246	317, 680			
Unrigged craft, all ports	155	16, 689	197, 795							155	16, 689	197, 795
District 2—Boston	1, 466	458, 806	19, 466, 030	275	108, 290	9, 033, 130	977	314, 820	9, 947, 225	214	35, 696	485, 675
Salem, Mass	33	5, 319	176, 785	11	288	37, 700	22	5, 031	139, 085			
Marblehead, Mass	20	1, 666	80, 590	3	73	4, 200	17	1, 593	76, 390			
Newburyport, Mass	25	11, 302	396, 800	10	453	53, 500	15	10, 849	343, 300			
Gloucester, Mass	55	4, 649	261, 735	10	549	64, 500	45	4, 100	197, 235			
Boston, Mass	666	255, 186	10, 538, 500	139	57, 849	4, 700, 030	527	197, 337	5, 838, 470			
Plymouth, Mass	13	760	28, 190	1	20	8, 000	11	633	17, 390			
Duxbury, Mass							1	107	2, 800			
Scituate, Mass	7	83	3, 135				7	83	3, 135			
Falmouth, Mass	20	2, 601	77, 045	2	31	5, 700	5	80	4, 490			
Provincetown, Mass							13	2, 490	66, 855			
Dennis, West Dennis, and South Dennis, Mass.	27	8, 814	277, 700				27	8, 814	277, 700			
Chatham, Mass	2	36	1, 100				2	36	1, 100			
Wellfleet, Mass	12	1, 775	58, 350				12	1, 775	58, 350			
Barnstable and Hyannis, Mass	20	3, 821	123, 050				20	3, 821	123, 050			
Edgartown, Mass	11	804	27, 150	1	16	1, 200	10	788	25, 950			
Nantucket, Mass	7	387	12, 350	1	7	1, 000	6	380	11, 350			
Fall River, Mass	87	58, 500	3, 437, 450	20	22, 109	2, 105, 700	67	36, 391	1, 331, 750			
New Bedford, Mass	70	25, 638	848, 705	13	3, 275	245, 400	57	22, 363	603, 305			
Bristol, R. I	19	1, 355	103, 020	7	318	68, 600	12	1, 037	34, 420			
Newport, R. I	64	6, 554	560, 630	17	1, 451	161, 200	47	5, 103	399, 430			
Providence, R. I	94	33, 860	1, 968, 070	40	21, 851	1, 576, 400	54	12, 009	391, 670			
Unrigged craft, all ports	214	35, 696	485, 675							214	35, 696	485, 675
District 3—New York	5, 205	1, 205, 684	60, 538, 535	1, 376	442, 871	40, 973, 060	2, 017	402, 704	14, 331, 805	1, 812	360, 109	5, 233, 670
New London, Conn	117	35, 448	1, 988, 180	42	18, 497	1, 504, 050	75	16, 951	484, 130			
Stonington, Conn	44	3, 719	198, 780	4	775	54, 000	40	2, 944	144, 780			
New Haven, Conn	134	45, 118	2, 195, 490	34	9, 001	754, 000	100	36, 117	1, 441, 490			
Bridgeport, Conn	77	13, 429	825, 180	29	7, 957	620, 650	48	5, 472	204, 530			
Hartford, Conn	57	7, 419	428, 850	23	4, 161	300, 600	34	3, 258	128, 250			
Patchogue, N. Y	62	1, 084	89, 730	3	47	11, 300	59	1, 037	78, 430			
New York, N. Y	2, 258	656, 675	43, 385, 250	972	360, 938	32, 951, 410	1, 286	295, 737	10, 433, 840			
Cold Spring Harbor, N. Y	62	3, 511	121, 530				62	3, 511	121, 530			
Albany, N. Y	219	32, 258	3, 519, 465	181	29, 377	3, 430, 200	38	2, 881	89, 265			
Port Jefferson, N. Y	55	6, 279	188, 715				55	6, 279	188, 715			
Greenport, N. Y	57	6, 784	283, 160	4	162	16, 500	53	6, 622	266, 660			
Sag Harbor, N. Y	11	1, 402	108, 040	1	648	86, 000	10	754	22, 040			
Newark, N. J	63	5, 157	428, 810	36	3, 570	347, 950	27	1, 587	80, 860			
Perth Amboy, N. J	177	27, 292	1, 543, 685	47	7, 738	896, 400	130	19, 554	647, 285			
Unrigged craft, all ports	1, 812	360, 109	5, 233, 670							1, 812	360, 109	5, 233, 670

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 1.—EQUIPMENT OF FLEETS IN GENERAL—Continued.

STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT—Continued.

DISTRICTS.	TOTAL OF ALL CRAFT.			STEAMERS.			SAILING VESSELS.			UNRIGGED CRAFT.		
	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.
District 4—Philadelphia	1,556	382,835	$15,051,700	355	91,065	$8,592,250	705	147,649	$5,038,200	496	144,121	$1,421,250
Tuckerton, N. J	14	1,868	74,600	2	68	12,600	12	1,800	62,000			
Somers Point, N. J	95	15,076	568,560	2	309	36,000	93	14,767	532,560			
Bridgeton, N. J	94	14,574	473,125	4	396	45,900	90	14,178	427,225			
Camden, N. J	109	19,486	1,195,300	44	10,514	901,750	65	8,972	293,550			
Burlington, N. J	16	1,486	114,100	16	1,486	114,100						
Trenton, N. J	27	1,762	43,650				27	1,762	43,650			
Philadelphia, Pa	542	156,721	8,994,490	249	63,535	5,882,400	293	93,186	3,112,090			
Wilmington, Del	143	26,086	2,096,535	38	14,757	1,599,500	105	11,329	497,035			
Milford, Del	1	83	6,000				1	83	6,000			
Seaford, Del	11	1,286	50,640				11	1,286	50,640			
New Castle, Del	5	181	7,900				5	181	7,900			
Chincoteague, Va	3	105	5,550				3	105	5,550			
Unrigged craft, all ports	496	144,121	1,421,250							496	144,121	1,421,250
District 5—Baltimore	922	138,443	7,046,760	229	71,756	5,355,050	533	40,535	1,466,060	160	26,152	225,650
Baltimore, Md	527	93,760	5,783,200	172	61,962	4,619,200	355	31,798	1,164,000			
Crisfield, Md	73	4,281	166,550	3	171	18,900	70	4,110	147,650			
Annapolis, Md	23	1,017	30,300				23	1,017	30,300			
Georgetown, D. C	97	10,528	707,310	42	8,939	654,000	55	1,589	53,310			
Onancock, Va	7	426	28,100	2	238	18,600	4	164	7,700			
Cape Charles, Va							1	24	1,800			
Alexandria, Va	35	2,279	105,650	10	446	44,350	25	1,833	61,300			
Unrigged craft, all ports	160	26,152	225,650							160	26,152	225,650
District 6—Norfolk	561	32,077	1,627,025	154	13,550	1,169,600	286	10,007	413,760	121	8,520	43,665
Norfolk, Va	120	8,312	604,440	66	5,575	483,400	54	2,737	121,040			
Newport News, Va	10	1,677	114,000	4	1,198	93,000	6	479	21,000			
Petersburg, Va	2	37	8,500	2	37	8,500						
Richmond, Va	23	2,813	201,000	16	1,178	139,100	7	1,635	61,900			
Tappahannock, Va	13	581	23,100				13	581	23,100			
Edenton, N. C	58	3,204	209,280	19	2,536	179,900	39	668	29,380			
Newbern, N. C	105	3,051	149,880	22	1,310	94,000	83	1,741	55,880			
Beaufort, N. C	57	1,295	67,880	2	73	8,300	55	1,222	59,580			
Wilmington, N. C	52	2,587	205,280	23	1,643	163,400	29	944	41,880			
Unrigged craft, all ports	121	8,520	43,665							121	8,520	43,665
District 7—Savannah	780	63,027	3,507,800	189	37,121	2,958,850	299	8,432	420,925	292	17,474	128,025
Georgetown, S. C	19	1,523	129,600	13	1,010	109,600	6	513	20,000			
Charleston, S. C	165	7,586	528,200	38	5,458	417,800	127	2,128	110,400			
Beaufort, S. C	25	967	113,450	10	670	91,500	15	297	21,950			
Savannah, Ga	80	23,594	1,629,550	36	21,541	1,554,100	44	2,053	75,450			
Brunswick, Ga	40	4,140	336,850	26	3,687	297,950	14	453	38,900			
St. Mary, Ga	2	57	7,000	1	34	5,000	1	23	2,000			
Fernandina, Fla	6	266	32,000	2	180	23,000	4	86	9,000			
Jacksonville, Fla	61	4,407	369,500	44	3,034	319,800	17	1,373	49,700			
St. Augustine, Fla	31	818	91,175	15	549	78,400	16	269	12,775			
Key West, Fla	59	2,195	142,450	4	958	61,700	55	1,237	80,750			
Unrigged craft, all ports	292	17,474	128,025							292	17,474	128,025
District 8—Mobile	480	28,847	1,440,220	126	11,413	967,750	243	9,671	429,160	111	7,763	43,310
Tampa, Fla	28	1,010	81,700	15	791	74,500	13	219	7,200			
Cedar Keys, Fla	22	853	62,200	10	628	44,400	12	225	17,800			
Apalachicola, Fla	20	1,376	109,150	13	1,257	101,000	7	119	8,150			
Pensacola, Fla	103	5,668	376,250	28	1,989	245,300	75	3,679	130,950			
Mobile, Ala	83	6,293	436,660	49	4,915	394,650	34	1,378	42,010			
Shieldsboro, Miss	113	5,884	330,950	11	1,833	107,900	102	4,051	223,050			
Unrigged craft, all ports	111	7,763	43,310							111	7,763	43,310
District 9—New Orleans	283	36,304	1,910,060	56	31,407	1,712,700	214	4,247	194,360	13	650	3,000
New Orleans, La	192	33,328	1,720,130	31	30,263	1,578,400	161	3,065	141,730			
Brashear, La	61	1,712	143,980	21	1,016	112,300	40	696	31,680			
Lake Charles, La	17	614	42,950	4	128	22,000	13	486	20,950			
Unrigged craft, all ports	13	650	3,000							13	650	3,000
District 10—Galveston	245	12,411	500,990	38	2,771	281,000	156	3,331	164,590	51	6,309	55,400
Galveston, Tex	167	5,133	389,790	35	2,482	248,000	132	2,651	141,790			
Corpus Christi, Tex	12	408	11,500	1	21	3,000	11	387	8,500			
Brownsville, Tex	7	399	38,000	2	268	30,000	5	131	8,000			
Eagle Pass, Tex	8	162	6,300				8	162	6,300			
Unrigged craft, all ports	51	6,309	55,400							51	6,309	55,400

TABLE 2.—EQUIPMENT OF FLEETS BY CLASSIFIED TONNAGE—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS

BY DISTRICTS.

STEAMERS.

	DISTRICTS AND STATES.	TOTAL.			2,500 TONS AND OVER.			1,000 TO 2,500 TONS.			500 TO 1,000 TONS.			400 TO 500 TONS.		
		Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.
1	Total	2,933	837,162	$73,554,540	60	178,505	$14,929,800	160	242,900	$17,455,700	248	176,431	$13,506,680	102	45,769	$3,521,700
2	Portland	135	26,918	2,511,150	....	....	....	9	12,208	962,000	6	4,954	385,000	4	1,786	177,000
3	Boston	275	108,290	9,033,130	13	39,810	3,727,600	21	34,239	2,020,500	24	16,073	995,680	9	4,299	300,000
4	New York	1,376	442.871	40,973,060	33	98,079	7,869.900	83	128,282	10,124,800	147	106,174	8,816,900	47	21,125	1,640,000
5	Philadelphia	355	91,065	8,592,250	6	18,200	1,574,300	15	20,303	1,662,600	22	14,535	1,271,400	20	8,713	741,100
6	Baltimore	229	71,756	5,355,050	2	5,266	395,000	17	25,696	1,547,000	34	23,835	1,640,800	9	4,036	281,800
7	Norfolk	154	13,550	1,169,600	....	....	....	....	....	....	2	1,156	38,000	4	1,785	170,800
8	Savannah	189	37,121	2,958,850	4	10,903	953,000	3	4,716	305,000	8	5,309	163,800	7	3,051	181,000
9	Mobile	126	11,413	967,750	....	....	....	....	....	....	1	957	15,000	....	....	....
10	New Orleans	56	31,407	1,712,700	2	6,247	410,000	12	17,456	833,800	4	3,438	180,100	2	974	30,000
11	Galveston	38	2,771	281,000	....	....	....	....	....	....	....	....	....	....	....	....

SAILING VESSELS.

	DISTRICTS AND STATES.	TOTAL.			2,500 TONS AND OVER.			1,000 TO 2,500 TONS.			500 TO 1,000 TONS.			400 TO 500 TONS.		
		Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.
1	Total	7,108	1,401,985	46,284,507	3	8,397	356,540	285	426,146	12,288,171	548	350,825	11,514,995	304	136,063	4,286,850
2	Portland	1,678	460,589	13,878,422	2	5,814	266,540	106	169,638	5,035,971	156	103,454	3,321,585	79	35,033	1,170,375
3	Boston	977	314,820	9,947,225	....	....	....	80	112,623	2,991,100	160	96,502	3,236,505	76	34,334	1,010,895
4	New York	2,017	402,704	14,331,805	1	2,583	90,000	96	138,626	4,046,100	142	94,919	3,028,900	81	36.123	1,087,800
5	Philadelphia	705	147,649	5,038,200	....	....	....	3	5,259	215,000	72	43,796	1,470,435	57	25,626	878,280
6	Baltimore	533	40,535	1,466,060	....	....	....	....	....	....	14	9,467	380,020	9	4,076	113,500
7	Norfolk	286	10,007	413,760	....	....	....	....	....	....	1	508	15,750	....	....	....
8	Savannah	299	8,432	420,925	....	....	....	....	....	....	....	....	....	2	871	26,000
9	Mobile	243	9,671	429,160	....	....	....	....	....	....	3	2,179	61,800	....	....	....
10	New Orleans	214	4,247	194,360	....	....	....	....	....	....	....	....	....	....	....	....
11	Galveston	156	3,331	164,590	....	....	....	....	....	....	....	....	....	....	....	....

BY STATES.

STEAMERS.

	DISTRICTS AND STATES.	TOTAL.			2,500 TONS AND OVER.			1,000 TO 2,500 TONS.			500 TO 1,000 TONS.			400 TO 500 TONS.		
		Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.
1	Total	2,933	837,162	73,554,540	60	178,505	14,929,800	160	242,900	17,455.700	248	176,431	13,506,680	102	45,769	3,521,700
2	Maine	127	26,522	2,463,750	....	....	....	9	12,208	962.000	6	4,954	385,000	4	1,786	177,000
3	New Hampshire	8	396	47,400	....	....	....	....	....	....	....	....	....	....	....	....
4	Massachusetts	211	84,670	7,226,930	9	28,360	2,837,600	18	29,581	1,880,500	19	12,280	761,680	9	4,299	300,000
5	Rhode Island	64	23,620	1,806,200	4	11,450	890,000	3	4,658	140,000	5	3,793	234,000	....	....	....
6	Connecticut	132	40,391	3,233,300	....	....	....	12	18,915	1,286,000	11	9,482	693,400	5	2,259	127,000
7	New York	1,161	391,172	36,495,410	33	98,079	7,869,900	71	109,367	8,838,800	131	93,801	7,843,500	40	17,880	1,463,000
8	New Jersey	151	24,081	2,354,700	....	....	....	1	1,023	65,000	8	4,555	387,000	10	4,468	347,500
9	Pennsylvania	249	63,535	5,882,400	4	12,773	1,025.000	11	14,321	1,072,600	16	11,193	979,400	12	5,231	443,600
10	Delaware	38	14,757	1,599,500	2	5,427	549,300	3	4,959	525,000	3	1,678	185,000	....	....	....
11	Maryland	175	62,133	4,638,100	2	5,266	395,000	16	24,370	1.487,000	29	20,353	1,380,800	6	2,653	183,800
12	Dist. of Columbia	42	8,939	654,000	....	....	....	1	1,326	60,000	5	3,482	260,000	3	1,383	98,000
13	Virginia	100	8,672	786.950	....	....	....	....	....	....	2	1,156	38,000	3	1,361	142,800
14	North Carolina	66	5,562	445,600	....	....	....	....	....	....	....	....	....	1	424	28,000
15	South Carolina	61	7,138	618,900	....	....	....	....	....	....	2	1,077	40,000	3	1,375	75,000
16	Georgia	63	25,262	1,857,050	4	10,903	953,000	3	4,716	305,000	5	3,475	90,700	3	1,245	94,000
17	Florida	131	9,386	948,100	....	....	....	....	....	....	1	757	33,100	1	431	12,000
18	Alabama	49	4,915	394,650	....	....	....	....	....	....	....	....	....	....	....	....
19	Mississippi	11	1,833	107,900	....	....	....	....	....	....	1	957	15,000	....	....	....
20	Louisiana	56	31,407	1,712,700	2	6,247	410,000	12	17,456	833,800	4	3,438	180,100	2	974	30,000
21	Texas	38	2,771	281,000	....	....	....	....	....	....	....	....	....	....	....	....

SAILING VESSELS.

	DISTRICTS AND STATES.	TOTAL.			2,500 TONS AND OVER.			1,000 TO 2,500 TONS.			500 TO 1,000 TONS.			400 TO 500 TONS.		
		Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.
1	Total	7,108	1,401,985	46,284,507	3	8,397	356,540	285	426,146	12,288,171	548	350,825	11,514,995	304	136,063	4,286,850
2	Maine	1,645	452,343	13,560,742	2	5,814	266,540	104	166,659	4,957,171	154	102,234	3,276,585	76	33,792	1,114,975
3	New Hampshire	33	8,246	317,680	....	....	....	2	2,979	78,800	2	1,220	45,000	3	1,241	55,400
4	Massachusetts	864	296,671	9,121,705	....	....	....	78	110,106	2,896,100	153	92,373	3,097,605	68	30,777	881,895
5	Rhode Island	113	18,149	825,520	....	....	....	2	2,517	95,000	7	4,129	138,900	8	3,557	129,000
6	Connecticut	297	64,742	2,403,180	....	....	....	5	5,633	193,000	42	29,269	1,115,590	18	7,849	301,200
7	New York	1,563	316,821	11,200,480	1	2,583	90,000	87	128,476	3,735,600	91	59,475	1,685,310	59	26,432	721,100
8	New Jersey	444	62,620	2,087,130	....	....	....	4	4,517	117,500	28	16,874	587,965	20	8,945	278.300
9	Pennsylvania	293	93,186	3,112,090	....	....	....	3	5,259	215,000	53	32,997	1,110,470	37	16,768	596,740
10	Delaware	122	12,879	561,575	....	....	....	....	....	....	....	....	....	4	1,755	68,740
11	Maryland	448	36,925	1,341,950	....	....	....	....	....	....	13	8,737	352,020	9	4,076	113,500
12	Dist. of Columbia	55	1,589	53,310	....	....	....	....	....	....	....	....	....	....	....	....
13	Virginia	113	7,558	303,390	....	....	....	....	....	....	2	1,338	43,750	....	....	....
14	North Carolina	206	4,575	186,720	....	....	....	....	....	....	....	....	....	....	....	....
15	South Carolina	148	2,938	152,350	....	....	....	....	....	....	....	....	....	1	444	16,000
16	Georgia	59	2,529	116,350	....	....	....	....	....	....	....	....	....	1	427	10,000
17	Florida	199	7,207	316,325	....	....	....	....	....	....	3	2,179	61,800	....	....	....
18	Alabama	34	1,378	42,010	....	....	....	....	....	....	....	....	....	....	....	....
19	Mississippi	102	4,051	223,050	....	....	....	....	....	....	....	....	....	....	....	....
20	Louisiana	214	4,247	194,360	....	....	....	....	....	....	....	....	....	....	....	....
21	Texas	156	3,331	164,590	....	....	....	....	....	....	....	....	....	....	....	....

CONSTRUCTION—Continued.

AND SAILING VESSELS OF 5 TONS BURDEN AND OVER, CLASSIFIED ACCORDING TO SIZE, BY DISTRICTS AND STATES.

BY DISTRICTS.

STEAMERS.

300 TO 400 TONS.			200 TO 300 TONS.			100 TO 200 TONS.			50 TO 100 TONS.			5 TO 50 TONS.			
Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	Number.	Tonnage.	Valuation.	
100	35,166	$2,822,170	127	31,587	$2,615,480	417	57,977	$7,208,855	516	36,646	$5,782,980	1,203	32,181	$5,711,175	1
1	393	35,000	5	1,354	122,000	19	2,759	321,800	23	1,513	209,400	68	1,951	298,950	2
7	2,490	268,000	4	1,004	96,400	28	3,946	531,800	41	2,887	442,420	128	3,542	650,730	3
39	13,575	1,367,470	54	13,048	1,370,930	224	31,243	4,057,800	249	17,610	3,092,460	500	13,735	2,632,800	4
26	9,482	575,800	25	6,346	527,500	38	5,233	729,900	57	4,191	708,800	146	4,062	800,850	5
11	3,684	276,000	10	2,562	170,500	16	2,170	353,055	27	1,944	341,350	103	2,563	349,545	6
3	1,029	77,000	6	1,538	101,200	30	3,922	260,100	34	2,398	262,800	75	1,722	259,700	7
7	2,322	132,900	10	2,589	90,100	22	3,042	398,400	43	3,057	370,050	85	2,132	364,600	8
2	717	29,000	10	2,448	103,650	28	3,931	356,000	24	1,758	230,400	61	1,602	233,700	9
3	1,123	46,000	2	456	15,000	3	469	70,000	13	911	86,800	15	333	41,000	10
1	351	15,000	1	242	18,200	9	1,262	130,000	5	377	38,500	22	539	79,300	11

SAILING VESSELS.

334	117,987	3,662,891	375	93,665	2,693,340	800	113,441	3,794,350	1,283	85,895	3,775,765	3,176	69,566	3,911,605	1
77	27,364	957,816	123	30,569	883,350	375	52,477	1,389,140	372	25,947	608,790	388	10,293	244,855	2
75	26,466	740,170	61	15,435	402,035	103	14,921	547,775	123	8,823	487,865	299	5,716	530,880	3
91	31,956	1,004,155	91	22,651	642,570	176	25,470	1,142,385	429	27,271	1,650,850	910	23,105	1,639,045	4
77	27,486	812,750	84	20,991	609,900	86	12,733	429,950	96	6,448	335,310	230	5,310	286,575	5
5	1,728	56,500	3	755	17,000	33	4,321	165,050	189	12,551	437,550	280	7,637	296,440	6
4	1,350	50,500	4	1,015	37,300	12	1,451	56,100	28	1,987	102,800	237	3,696	151,310	7
4	1,301	38,000	2	508	20,000	2	262	5,500	10	684	49,500	279	4,806	281,925	8
1	336	3,000	5	1,167	58,800	8	1,128	47,800	14	938	48,800	212	3,923	208,960	9
....	....	....	....	....	....	2	284	9,500	8	521	21,600	204	3,442	163,260	10
....	....	....	2	574	22,385	3	394	1,150	14	725	32,700	137	1,638	108,355	11

BY STATES.

STEAMERS.

100	35,166	2,822,170	127	31,587	2,615,480	417	57,977	7,208,855	516	36,646	5,782,980	1,203	32,181	5,711,175	1
1	393	35,000	5	1,354	122,000	18	2,580	316,800	22	1,445	196,400	62	1,802	269,550	2
....	....	....	....	....	....	1	179	5,000	1	68	13,000	6	149	29,400	3
4	1,444	143,000	2	521	61,400	21	3,119	441,300	33	2,298	327,920	96	2,768	473,530	4
3	1,046	125,000	2	483	35,000	7	827	90,500	8	589	114,500	32	774	177,200	5
4	1,336	86,000	10	2,442	212,200	28	3,921	519,350	11	742	98,500	51	1,294	210,850	6
32	11,197	1,198,470	39	9,402	1,062,230	174	24,197	3,164,350	220	15,543	2,745,960	421	11,706	2,309,200	7
10	3,659	359,000	10	2,543	172,400	29	4,148	444,100	31	2,309	349,800	52	1,376	229,900	8
17	6,097	259,800	17	4,271	405,200	28	3,832	613,800	40	2,916	534,000	104	2,901	549,000	9
2	768	40,000	3	736	46,400	3	378	46,100	4	291	73,000	18	520	134,700	10
8	2,680	216,000	6	1,502	112,500	16	2,170	353,055	18	1,331	251,500	74	1,808	258,445	11
3	1,004	60,000	3	853	43,000	....	....	....	5	337	54,600	22	554	78,400	12
....	....	....	4	971	60,000	18	2,328	148,500	24	1,637	221,750	49	1,219	175,900	13
3	1,029	77,000	3	774	56,200	12	1,594	111,600	14	1,037	76,300	33	704	96,500	14
3	975	73,000	4	1,022	52,100	6	897	109,700	17	1,193	156,000	26	599	113,100	15
3	1,040	34,900	6	1,567	38,000	8	1,063	129,800	8	586	90,000	23	667	121,650	16
1	307	25,000	3	762	29,500	24	3,222	351,200	30	2,173	240,750	71	1,734	256.550	17
1	335	9,000	7	1,686	74,150	11	1,650	158,700	10	698	82,700	20	537	70,100	18
1	382	20.000	....	....	....	1	132	5,000	2	165	31,000	6	197	36,900	19
3	1,123	46,000	2	456	15,000	3	469	70,000	13	911	86,800	15	333	41,000	20
1	351	15,000	1	242	18,200	9	1,262	130,000	5	377	38,500	22	539	79,300	21

SAILING VESSELS.

334	117,987	3,662,891	375	93,665	2,693,340	800	113,441	3,794,350	1.283	85,895	3,775,765	3,176	69,566	3,911,605	1
75	26,646	897,816	120	29,774	848,350	372	52,037	1,370,940	362	25,294	589,390	380	10,093	238,975	2
2	718	60,000	3	795	35,000	3	440	18,200	10	653	19,400	8	200	5,880	3
69	24,331	660,970	50	12,524	334,685	95	13,783	407,685	114	8,102	427,165	237	4,675	415,600	4
6	2,135	79,200	11	2,911	67,350	8	1,138	140,090	9	721	60,700	62	1,041	115,280	5
20	6,910	256,790	10	2,641	79,000	47	6,714	236,130	55	4,112	129,540	100	1,614	91,930	6
68	23,994	714,240	75	18,556	522,070	117	16,945	866,855	348	21,446	1,435,850	717	18,914	1,429,455	7
21	7,614	267,125	37	9,262	274,000	42	6,130	153,250	59	3,870	167,095	233	5,408	241,895	8
56	19,916	523,750	44	10,889	280,600	29	4,518	170,200	25	1,682	120,300	46	1,157	95,030	9
3	1,008	55,000	9	2,394	96,800	27	3,896	145,900	37	2,541	129,375	42	1,285	65,760	10
5	1,728	56,500	3	755	17,000	31	3,940	154,250	172	11,493	402,150	215	6,196	246,530	11
....	....	....	....	....	....	1	188	7.000	9	578	18,100	45	823	28,210	12
3	1,015	43,000	4	915	37,300	8	1,093	38,400	22	1,459	69,700	74	1,738	71,240	13
1	335	7,500	....	....	....	5	551	21,500	15	1,076	54,400	185	2,613	103,320	14
....	....	....	....	....	....	....	....	....	4	233	14,000	143	2,261	122,350	15
2	670	20,000	....	....	....	....	....	....	3	212	20,000	53	1,220	66,350	16
2	631	18,000	2	508	20,000	4	545	11,500	7	472	34,050	181	2,872	170,975	17
1	336	3,000	1	225	8,800	....	....	....	6	381	13,350	26	436	16,860	18
....	....	....	4	942	50,000	6	845	41,800	4	324	16,900	88	1,940	114,350	19
....	....	....	....	....	....	2	284	9,500	8	521	21,600	204	3,442	163,260	20
....	....	....	2	574	22,385	3	394	1,150	14	725	32,700	137	1,638	108,355	21

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 3.—EQUIPMENT OF FLEETS BY CLASSIFIED OCCUPATIONS—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT OF 5 TONS BURDEN AND OVER, BY OCCUPATIONS.

DISTRICTS.	TOTAL.				STEAMERS.											
					Passenger and freight.				Towing.				Ferry.			
	Number.	Tonnage.	Valuation.	Average value per ton.	Number.	Tonnage.	Valuation.	Average value per ton.	Number.	Tonnage.	Valuation.	Average value per ton.	Number.	Tonnage.	Valuation.	Average value per ton.
Total	13,466	2,862,630	$127,676,487	$44.60	810	487,939	$36,989,280	$75.81	1,095	61,359	$10,203,330	$166.29	214	98,174	$7,907,700	$80.55
1. Portland	1,968	504,196	16,587,367	32.90	56	20,478	1,674,350	81.76	49	2,782	395,900	142.31	9	735	102,500	139.46
2. Boston	1,466	458,806	19,466,030	42.43	82	86,429	6,502,620	75.24	83	4,412	702,580	159.24	15	5,367	365,280	68.06
3. New York	5,205	1,205,684	60,538,535	50.21	285	215,090	17,096,460	79.49	536	35,122	5,886,500	167.60	142	78,407	6,363,420	81.16
4. Philadelphia	1,556	382,835	15,051,700	39.32	112	61,099	4,902,200	80.23	124	5,857	1,123,000	191.74	26	9,491	828,500	87.29
5. Baltimore	922	138,443	7,046,760	50.90	84	57,562	3,783,750	65.73	103	4,038	698,900	173.08	9	1,791	86,500	48.30
6. Norfolk	561	32,077	1,627,025	50.72	55	6,809	485,000	71.23	58	2,114	317,600	150.24	3	1,268	88,000	69.40
7. Savannah	780	63,027	3,507,800	55.66	66	26,781	1,805,700	67.42	64	3,332	526,350	157.97	9	1,037	61,500	59.31
8. Mobile	480	28,847	1,440,220	49.93	44	6,573	367,400	55.90	53	2,741	415,000	151.40	......	......	......	......
9. New Orleans	283	36,304	1,910,060	52.61	18	6,402	317,300	49.56	14	500	61,500	123.00	1	78	12,000	153.85
10. Galveston	245	12,411	500,990	40.37	8	716	54,500	76.12	11	461	76,000	164.86	......	......	......	......

DISTRICTS.	STEAMERS—continued.															
	Yachts.				Harbor.				Miscellaneous.				No traffic report.			
	Number.	Tonnage.	Valuation.	Average value per ton.	Number.	Tonnage.	Valuation.	Average value per ton.	Number.	Tonnage.	Valuation.	Average value per ton.	Number.	Tonnage.	Valuation.	Average value per ton.
Total	170	11,328	$3,520,610	$310.79	94	13,843	$1,446,150	$104.47	153	69,127	$5,451,570	$78.86	397	95,392	$8,035,900	$84.24
1. Portland	2	43	11,500	267.44	2	324	75,000	231.48	1	408	15,000	36.76	16	2,148	236,900	110.29
2. Boston	36	1,856	469,300	252.86	11	951	102,250	107.52	4	1,334	124,000	92.95	44	7,941	767,100	96.60
3. New York	100	8,215	2,723,610	331.54	61	8,844	860,900	97.34	98	40,740	3,603,170	88.44	154	56,453	4,439,000	78.63
4. Philadelphia	13	529	165,700	313.23	2	470	53,500	113.83	16	2,872	366,800	127.72	62	10,747	1,152,550	107.24
5. Baltimore	4	331	87,000	262.84	3	1,728	187,000	108.22	5	1,713	156,500	91.36	21	4,593	355,400	77.38
6. Norfolk	1	42	5,000	119.05	4	169	17,500	103.55	10	1,389	68,000	48.96	23	1,759	188,500	107.16
7. Savannah	7	154	41,500	269.48	4	171	30,000	175.44	4	104	18,600	178.85	35	5,542	475,200	85.75
8. Mobile	4	83	8,800	106.02	......	......	......	......	......	......	......	......	25	2,016	176,550	87.57
9. New Orleans	......	......	......	......	2	249	40,000	160.64	14	20,519	1,082,000	52.73	7	3,659	199,900	54.63
10. Galveston	3	75	8,200	109.33	5	937	80,000	85.38	1	48	17,500	364.58	10	534	44,800	83.90

DISTRICTS.	SAILING VESSELS.											
	Freight.				Harbor.				Yachts.			
	Number.	Tonnage.	Valuation.	Average value per ton.	Number.	Tonnage.	Valuation.	Average value per ton.	Number.	Tonnage.	Valuation.	Average value per ton.
Total	5,229	1,260,362	$38,777,627	$30.77	368	15,849	$1,151,540	$72.66	628	14,428	$2,681,455	$185.85
1. Portland	1,523	430,981	12,919,607	29.98	11	214	5,410	25.28	31	418	35,690	85.38
2. Boston	655	285,700	8,273,500	28.96	32	1,474	153,150	103.90	175	4,122	740,405	179.62
3. New York	1,213	343,868	10,672,110	31.04	226	11,038	672,850	60.96	319	8,357	1,764,085	211.09
4. Philadelphia	563	138,404	4,576,940	33.07	8	466	84,000	180.26	56	926	102,040	110.19
5. Baltimore	456	37,361	1,317,620	35.27	4	218	11,700	53.67	9	124	9,820	79.19
6. Norfolk	187	6,802	253,980	37.34	9	451	47,700	105.76	2	25	1,250	50.00
7. Savannah	185	6,164	244,180	39.61	42	1,238	124,720	100.74	9	118	6,500	55.08
8. Mobile	156	5,674	245,160	43.21	25	559	39,250	70.21	10	94	8,350	88.83
9. New Orleans	168	3,557	159,420	44.82	5	54	2,860	52.96	3	39	2,250	57.69
10. Galveston	123	1,851	115,110	62.19	6	137	9,900	72.26	14	205	11,065	53.98

DISTRICTS.	SAILING VESSELS—continued.								UNRIGGED CRAFT.			
	Miscellaneous.				No traffic report.				Unclassified.			
	Number.	Tonnage.	Valuation.	Average value per ton.	Number.	Tonnage.	Valuation.	Average value per ton.	Number.	Tonnage.	Valuation.	Average value per ton.
Total	52	2,553	$75,360	$29.52	831	108,793	$3,598,525	$33.08	3,425	623,483	$7,837,440	$12.57
1. Portland	3	47	850	18.09	110	28,929	916,865	31.69	155	16,689	197,795	11.85
2. Boston	1	46	1,500	32.61	114	23,478	778,670	33.17	214	35,696	485,675	13.61
3. New York	28	1,186	45,480	38.35	231	38,255	1,177,280	30.77	1,812	360,109	5,233,670	14.53
4. Philadelphia	10	1,135	20,800	18.33	68	6,718	254,420	37.87	496	144,121	1,421,250	9.86
5. Baltimore	1	19	1,500	78.95	63	2,813	125,420	44.59	160	26,152	225,650	8.63
6. Norfolk	1	8	130	16.25	87	2,721	110,700	40.68	121	8,520	43,665	5.13
7. Savannah	5	59	2,500	42.37	58	853	43,025	50.44	292	17,474	128,025	7.33
8. Mobile	......	......	......	......	52	3,344	136,400	40.79	111	7,763	43,310	5.58
9. New Orleans	2	15	1,100	73.33	36	582	28,730	49.36	13	650	3,000	4.62
10. Galveston	1	38	1,500	39.47	12	1,100	27,015	24.56	51	6,309	55,400	8.78

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 4.—OWNERSHIP BY CLASSES—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS AND SAILING VESSELS ALLOTTED RESPECTIVELY TO INDIVIDUAL, JOINT STOCK, AND CORPORATE OWNERS.

ALL STEAMERS AND SAILING VESSELS.

DISTRICTS.	TOTAL.		NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
			Individual.		Joint stock.		Corporate.				
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Individual.	Joint stock.	Corporate.
Steam and sail	9,151	2,061,323	7,901	1,404,883	215	75,827	1,032	580,613	$60,509,762	$5,250,750	$43,768,790
Steam	2,626	758,577	1,548	156,974	148	46,488	930	555,115	18,905,530	4,255,700	43,284,910
Sail	6,525	1,302,746	6,356	1,247,909	67	29,339	102	25,498	41,604,232	995,050	483,880

STEAMERS.

PASSENGER AND FREIGHT.

DISTRICTS.	Total Number.	Total Tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total	810	487,939	324	62,510	82	38,143	404	387,286	5,371,470	3,284,000	28,333,810
1. Portland	56	20,478	20	1,810	4	241	32	18,427	149,350	30,000	1,495,000
2. Boston	82	86,429	15	2,578	1	46	66	83,805	278,720	7,000	6,216,900
3. New York	285	215,090	103	25,202	43	27,136	139	162,752	1,905,150	2,611,000	12,580,310
4. Philadelphia	112	61,099	32	6,545	8	1,037	72	53,517	424,100	138,000	4,340,100
5. Baltimore	84	57,562	26	8,136	11	5,847	47	43,579	1,670,500	280,000	1,833,250
6. Norfolk	55	6,809	31	3,212	6	1,402	18	2,195	211,000	94,500	179,500
7. Savannah	66	26,781	42	6,097	4	1,903	20	18,781	295,950	60,000	1,449,750
8. Mobile	44	6,573	36	5,596	4	404	4	573	275,900	48,500	43,000
9. New Orleans	18	6,402	13	2,955	1	127	4	3,320	126,300	15,000	176,000
10. Galveston	8	716	6	379	....	....	2	337	34,500	....	20,000

TOWING.

DISTRICTS.	Total Number.	Total Tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total	1,095	61,359	796	35,818	38	2,795	261	22,746	6,154,300	384,000	3,665,030
1. Portland	49	2,782	27	1,029	14	1,438	8	315	148,400	195,500	52,000
2. Boston	83	4,412	41	1,682	1	15	41	2,715	246,300	5,000	451,280
3. New York	536	35,122	383	18,808	16	1,152	137	15,162	3,274,750	165,500	2,446,250
4. Philadelphia	124	5,857	104	4,555	....	....	20	1,302	954,000	....	169,000
5. Baltimore	103	4,038	85	2,886	4	88	14	1,064	466,900	10,000	222,000
6. Norfolk	58	2,114	48	1,602	....	....	10	512	241,300	....	76,300
7. Savannah	64	3,332	51	2,441	....	....	13	891	392,350	....	134,000
8. Mobile	53	2,741	38	2,098	2	68	13	575	328,800	5,000	81,200
9. New Orleans	14	500	13	466	1	34	....	....	58,500	3,000	....
10. Galveston	11	461	6	251	....	....	5	210	43,000	....	33,000

FERRY.

DISTRICTS.	Total Number.	Total Tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total	214	98,174	63	26,945	13	3,806	138	67,423	2,315,970	375,000	5,216,730
1. Portland	9	735	4	83	1	136	4	516	22,000	15,000	65,500
2. Boston	15	5,367	8	3,393	....	....	7	1,974	199,080	....	166,200
3. New York	142	78,407	43	23,265	12	3,670	87	51,472	2,066,390	360,000	3,937,030
4. Philadelphia	26	9,491	....	....	....	....	26	9,491	....	....	828,500
5. Baltimore	9	1,791	3	53	....	....	6	1,738	6,500	....	80,000
6 Norfolk	3	1,268	....	....	....	....	3	1,268	....	....	88,000
7. Savannah	9	1,037	4	73	....	....	5	964	10,000	....	51,500
9. New Orleans	1	78	1	78	....	....	....	....	12,000	....	....

YACHTS.

DISTRICTS.	Total Number.	Total Tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total	170	11,328	160	10,840	1	6	9	482	3,390,920	1,200	128,490
1. Portland	2	43	2	43	....	....	....	....	11,500	....	....
2. Boston	36	1,856	36	1,856	....	....	....	....	469,300	....	....
3. New York	100	8,215	96	7,878	....	....	4	337	2,617,120	....	106,490
4. Philadelphia	13	529	11	506	1	6	1	17	159,500	1,200	5,000
5. Baltimore	4	331	4	331	....	....	....	....	87,000	....	....
6. Norfolk	1	42	1	42	....	....	....	....	5,000	....	....
7. Savannah	7	154	6	127	....	....	1	27	31,500	....	10,000
8. Mobile	4	83	2	21	....	....	2	62	3,800	....	5,000
10. Galveston	3	75	2	36	....	....	1	39	6,200	....	2,000

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 4.—OWNERSHIP BY CLASSES—Continued.

STEAMERS—Continued.

HARBOR.

DISTRICTS.	TOTAL.		NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
			Individual.		Joint stock.		Corporate.				
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Individual.	Joint stock.	Corporate.
Total	94	13,843	51	4,650	8	1,121	35	8,072	$456,650	$117,000	$872,500
1. Portland	2	324					2	324			75,000
2. Boston	11	951	4	167			7	784	12,750		89,500
3. New York	61	8,844	37	3,660	4	662	20	4,522	331,400	52,000	477,500
4. Philadelphia	2	470					2	470			53,500
5. Baltimore	3	1,728	1	126			2	1,602	50,000		137,000
6. Norfolk	4	169	3	36	1	133			7,500	10,000	
7. Savannah	4	171	4	171					30,000		
9. New Orleans	2	249			2	249				40,000	
10. Galveston	5	937	2	490	1	77	2	370	25,000	15,000	40,000

MISCELLANEOUS.

DISTRICTS.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Individual.	Joint stock.	Corporate.
Total	153	69,127	82	9,239	1	214	70	59,674	730,220	45,000	4,676,350
1. Portland	1	408					1	408			15,000
2. Boston	4	1,334	1	40			[illegible]	1,294	6,000		118,000
3. New York	98	40,740	61	7,856			37	32,884	587,820		3,015,350
4. Philadelphia	16	2,872	6	424	1	214	9	2,234	82,800	45,000	239,000
5. Baltimore	5	1,713	3	245			2	1,468	7,000		149,500
6. Norfolk	10	1,389	6	508			4	881	25,000		43,000
7. Savannah	4	104	4	104					18,600		
9. New Orleans	14	20,519	1	62			13	20,457	3,000		1,079,000
10. Galveston	1	48					1	48			17,500

NO TRAFFIC REPORT.

DISTRICTS.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Individual.	Joint stock.	Corporate.
Total	90	16,807	72	6,972	5	403	13	9,432	486,000	49,500	392,000
1. Portland	3	716	2	41			1	675	5,000		75,000
2. Boston	2	21	1	7	1	14			1,000	1,000	
3. New York	43	9,485	34	3,680	[illegible]	277	7	5,528	346,100	40,000	167,000
4. Philadelphia	9	673	8	611	1	62			44,950	1,000	
5. Baltimore	7	2,906	4	800			3	2,106	18,900		116,000
6. Norfolk	1	197	1	197					8,000		
7. Savannah	[illegible]	629	8	579	1	50			24,000	7,500	
8. Mobile	5	774	5	774					9,750		
9. New Orleans	4	1,148	3	53			1	1,095	10,000		32,000
10. Galveston	7	258	6	230			1	28	18,300		2,000

SAILING VESSELS.

FREIGHT.

DISTRICTS.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Individual.	Joint stock.	Corporate.
Total	5,229	1,260,362	5,124	1,209,053	48	28,181	57	23,128	37,423,227	937,350	417,050
1. Portland	1,523	430,981	1,497	411,692	22	18,718	4	571	12,214,107	687,600	17,900
2. Boston	655	285,700	626	268,033			29	17,667	7,993,300		280,200
3. New York	1,213	343,868	1,187	333,196	17	8,403	9	2,269	10,413,860	211,250	47,000
4. Philadelphia	563	138,404	555	136,949	2	74	6	1,381	4,549,040	4,200	23,700
5. Baltimore	456	37,361	454	37,104	1	215	1	42	1,308,620	6,000	3,000
6. Norfolk	187	6,802	185	6,393			2	409	241,480		12,500
7. Savannah	185	6,164	185	6,164					244,180		
8. Mobile	156	5,674	144	4,114	6	771	6	789	184,110	28,300	32,750
9. New Orleans	168	3,557	168	3,557					159,420		
10. Galveston	123	1,851	123	1,851					115,110		

HARBOR.

DISTRICTS.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Individual.	Joint stock.	Corporate.
Total	368	15,849	332	14,176	15	884	21	789	1,072,790	47,300	31,450
1. Portland	11	214	11	214					5,410		
2. Boston	32	1,474	32	1,474					153,150		
3. New York	226	11,038	198	9,635	11	680	17	723	618,000	29,700	25,150
4. Philadelphia	8	466	8	466					84,000		
5. Baltimore	4	218	4	218					11,700		
6. Norfolk	9	451	8	387	1	64			46,700	1,000	
7. Savannah	42	1,238	42	1,238					124,720		
8. Mobile	25	559	22	447	2	96	1	16	23,250	15,000	1,000
9. New Orleans	5	54	5	54					2,860		
10. Galveston	6	137	2	43	1	44	3	50	3,000	1,600	5,300

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 4.—OWNERSHIP BY CLASSES—Continued.

SAILING VESSELS—Continued.

YACHTS.

DISTRICTS.	TOTAL.		NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
			Individual.		Joint stock.		Corporate.		Individual.	Joint stock.	Corporate.
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
Total	628	14,428	626	14,406	1	10	1	12	$2,678,955	$500	$2,000
1. Portland	31	418	31	418					35,690		
2. Boston	175	4,122	175	4,122					740,405		
3. New York	319	8,357	318	8,345			1	12	1,762,085		2,000
4. Philadelphia	56	926	56	926					102,040		
5. Baltimore	9	124	9	124					9,820		
6. Norfolk	2	25	2	25					1,250		
7. Savannah	9	118	8	108	1	10			6,000	500	
8. Mobile	10	94	10	94					8,350		
9. New Orleans	3	39	3	39					2,250		
10. Galveston	14	205	14	205					11,065		

MISCELLANEOUS.

DISTRICTS.	Total Number.	Total Tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total	52	2,553	28	941	1	43	23	1,569	37,980	4,000	33,380
1. Portland	3	47	3	47					850		
2. Boston	1	46	1	46					1,500		
3. New York	28	1,186	14	709			14	477	28,900		16,580
4. Philadelphia	10	1,135			1	43	9	1,092		4,000	16,800
5. Baltimore	1	19	1	19					1,500		
6. Norfolk	1	8	1	8					130		
7. Savannah	5	59	5	59					2,500		
9. New Orleans	2	15	2	15					1,100		
10. Galveston	1	38	1	38					1,500		

NO TRAFFIC REPORT.

DISTRICTS.	Total Number.	Total Tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total	248	9,554	246	9,333	2	221			391,280	5,900	
1. Portland	23	941	23	941					22,110		
2. Boston	24	1,110	24	1,110					59,050		
3. New York	107	3,341	106	3,175	1	166			123,990	5,000	
4. Philadelphia	22	1,468	22	1,468					80,650		
5. Baltimore	16	1,113	16	1,113					51,320		
6. Norfolk	12	224	12	224					7,700		
7. Savannah	16	252	16	252					14,400		
8. Mobile	9	437	9	437					23,600		
9. New Orleans	9	142	8	87	1	55			3,830	900	
10. Galveston	10	526	10	526					4,630		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 5.—OWNERSHIP BY LOCALITIES—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS AND SAILING VESSELS ALLOTTED RESPECTIVELY TO INDIVIDUAL, JOINT STOCK, AND CORPORATE OWNERS.

ALL STEAMERS AND SAILING VESSELS.

DISTRICTS AND CLASSES.	TOTAL.		NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
			Individual.		Joint stock.		Corporate.				
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Individual.	Joint stock.	Corporate.
Total	9,151	2,061,323	7,904	1,404,883	215	75,827	1,032	580,613	$60,509,762	$5,250,750	$43,768,790
Steam	2,626	758,577	1,548	156,974	148	46,488	930	555,115	18,905,530	4,255,700	43,284,910
Sail	6,525	1,302,746	6,356	1,247,909	67	29,339	102	25,498	41,604,232	995,050	483,880
STEAMERS.											
District 1—Portland	122	25,486	55	3,006	19	1,815	48	20,665	336,250	240,500	1,777,500
Passenger and freight	56	20,478	20	1,810	4	241	32	18,427	149,350	30,000	1,495,000
Towing	49	2,782	27	1,029	14	1,438	8	315	148,400	195,500	52,000
Ferry	9	735	4	83	1	136	4	516	22,000	15,000	65,500
Yachts	2	43	2	43					11,500		
Harbor	2	324					2	324			75,000
Miscellaneous	1	408					1	408			15,000
No traffic report	3	716	2	41			1	675	5,000		75,000
District 2—Boston	233	100,370	106	9,723	3	75	124	90,572	1,213,150	13,000	7,041,880
Passenger and freight	82	86,429	15	2,578	1	46	66	83,805	278,720	7,000	6,216,900
Towing	83	4,412	41	1,682	1	15	41	2,715	246,300	5,000	451,280
Ferry	15	5,367	8	3,393			7	1,974	199,080		166,200
Yachts	36	1,856	36	1,856					469,300		
Harbor	11	951	4	167			7	784	12,750		89,500
Miscellaneous	4	1,334	1	40			3	1,294	6,000		118,000
No traffic report	2	21	1	7	1	14			1,000	1,000	
District 3—New York	1,265	395,903	757	90,349	77	32,897	431	272,657	11,128,730	3,228,500	22,729,930
Passenger and freight	285	215,090	103	25,202	43	27,136	139	162,752	1,905,150	2,611,000	12,580,310
Towing	536	35,122	383	18,808	16	1,152	137	15,162	3,274,750	165,500	2,446,250
Ferry	142	78,407	43	23. 265	12	3,670	87	51,472	2,066,390	360,000	3,937,030
Yachts	100	8,215	96	7,878			4	337	2,617,120		106,490
Harbor	61	8,844	37	3,660	4	662	20	4,522	331,400	52,000	477. 500
Miscellaneous	98	40,740	61	7,856			37	32,884	587,820		3,015,350
No traffic report	43	9,485	34	3,680	2	277	7	5,528	346,100	40,000	167,000
District 4—Philadelphia	302	80,991	161	12,641	11	1,319	130	67,031	1,665,350	185,200	5,635,100
Passenger and freight	112	61,099	32	6,545	8	1,037	72	53,517	424,100	138,000	4,340,100
Towing	124	5,857	104	4,555			20	1,302	954,000		169,000
Ferry	26	9,491					26	9,491			828,500
Yachts	13	529	11	506	1	6	1	17	159,500	1,200	5,000
Harbor	2	470					2	470			53,500
Miscellaneous	16	2,872	6	424	1	214	9	2,234	82,800	45,000	239,000
No traffic report	9	673	8	611	1	62			44,950	1,000	
District 5—Baltimore	215	70,069	126	12,577	15	5,935	74	51,557	2,306,800	290,000	2,537,750
Passenger and freight	84	57,562	26	8,136	11	5,847	47	43,579	1,670,500	280,000	1,833,250
Towing	103	4,038	85	2,886	4	88	14	1,064	466,900	10,000	222,000
Ferry	9	1,791	3	53			6	1,738	6,500		80,000
Yachts	4	331	4	331					87,000		
Harbor	3	1,728	1	126			2	1,602	50,000		137,000
Miscellaneous	5	1,713	3	245			2	1,468	7,000		149,500
No traffic report	7	2,906	4	800			3	2,106	18,900		116,000
District 6—Norfolk	132	11,988	90	5,597	7	1,535	35	4,856	497,800	104,500	386,800
Passenger and freight	55	6,809	31	3,212	6	1,402	18	2,195	211,000	94,500	179,500
Towing	58	2,114	48	1,602			10	512	241,300		76,300
Ferry	3	1,268					3	1,268			88,000
Yachts	1	42	1	42					5,000		
Harbor	4	169	3	36	1	133			7,500	10,000	
Miscellaneous	10	1,389	6	508			4	881	25,000		43,000
No traffic report	1	197	1	197					8,000		
District 7—Savannah	163	32,208	119	9,592	5	1,953	39	20,663	802,400	67,500	1,645,250
Passenger and freight	66	26,781	42	6,097	4	1,903	20	18,781	295,950	60,000	1,449,750
Towing	64	3,332	51	2,441			13	891	392,350		134,000
Ferry	9	1,037	4	73			5	964	10,000		51,500
Yachts	7	154	6	127			1	27	31,500		10,000
Harbor	4	171	4	171					30,000		
Miscellaneous	4	104	4	104					18,600		
No traffic report	9	629	8	579	1	50			24,000	7,500	
District 8—Mobile	106	10,171	81	8,489	6	472	19	1,210	618,250	53,500	129,200
Passenger and freight	44	6,573	36	5,596	4	404	4	573	275,900	48,500	43,000
Towing	53	2,741	38	2,098	2	68	13	575	328,800	5,000	81,200
Yachts	4	83	2	21			2	62	3,800		5,000
No traffic report	5	774	5	774					9,750		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 5.—OWNERSHIP BY LOCALITIES—Continued.

STEAMERS—Continued.

DISTRICTS AND CLASSES.	TOTAL.		NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
			Individual.		Joint stock.		Corporate.				
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Individual.	Joint stock.	Corporate.
District 9—New Orleans	53	28, 896	31	3, 614	4	410	18	24, 872	$209, 800	$58, 000	$1, 287, 000
Passenger and freight	18	6, 402	13	2, 955	1	127	4	3, 320	126, 300	15, 000	176, 000
Towing	14	500	13	466	1	34			58, 500	3, 000	
Ferry	1	78	1	78					12, 000		
Harbor	2	249			2	249				40, 000	
Miscellaneous	14	20, 519	1	62			13	20, 457	3, 000		1, 079, 000
No traffic report	4	1, 148	3	53			1	1, 095	10, 000		32, 000
District 10—Galveston	35	2, 495	22	1, 386	1	77	12	1, 032	127, 000	15, 000	114, 500
Passenger and freight	8	716	6	379			2	337	34, 500		20, 000
Towing	11	461	6	251			5	210	43, 000		33, 000
Yachts	3	75	2	36			1	39	6, 200		2, 000
Harbor	5	937	2	490	1	77	2	370	25, 000	15, 000	40, 000
Miscellaneous	1	48					1	48			17, 500
No traffic report	7	258	6	230			1	28	18, 300		2, 000

SAILING VESSELS.

DISTRICTS AND CLASSES.	TOTAL.		NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
			Individual.		Joint stock.		Corporate.				
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Individual.	Joint stock.	Corporate.
District 1—Portland	1, 591	432, 601	1, 565	413, 312	22	18, 718	4	571	12, 278, 167	687, 600	17, 900
Freight	1, 523	430, 981	1, 497	411, 692	22	18, 718	4	571	12, 214, 107	687, 600	17, 900
Harbor	11	214	11	214					5, 410		
Yachts	31	418	31	418					35, 690		
Miscellaneous	3	47	3	47					850		
No traffic report	23	941	23	941					22, 110		
District 2—Boston	887	292, 452	858	274, 785			29	17, 667	8, 947, 405		280, 200
Freight	655	285, 700	626	268, 033			29	17, 667	7, 993, 300		280, 200
Harbor	32	1, 474	32	1, 474					153, 150		
Yachts	175	4, 122	175	4, 122					740, 405		
Miscellaneous	1	46	1	46					1, 500		
No traffic report	24	1, 110	24	1, 110					59, 050		
District 3—New York	1, 893	367, 790	1, 823	355, 060	29	9, 249	41	3, 481	12, 946, 835	245, 950	90, 730
Freight	1, 213	343, 868	1, 187	333, 196	17	8, 403	9	2, 269	10, 413, 860	211, 250	47, 000
Harbor	226	11, 038	198	9, 635	11	680	17	723	618, 000	29, 700	25, 150
Yachts	319	8, 357	318	8, 345			1	12	1, 762, 085		2, 000
Miscellaneous	28	1, 186	14	709			14	477	28, 900		16, 580
No traffic report	107	3, 341	106	3, 175	1	166			123, 990	5, 000	
District 4—Philadelphia	659	142, 399	641	139, 809	3	117	15	2, 473	4, 815, 730	8, 200	40, 500
Freight	563	138, 404	555	136, 949	2	74	6	1, 381	4, 549, 040	4, 200	23, 700
Harbor	8	466	8	466					84, 000		
Yachts	56	926	56	926					102, 040		
Miscellaneous	10	1, 135			1	43	9	1, 092		4, 000	16, 800
No traffic report	22	1, 468	22	1, 468					80, 650		
District 5—Baltimore	486	38, 835	484	38, 578	1	215	1	42	1, 382, 960	6, 000	3, 000
Freight	456	37, 361	454	37, 104	1	215	1	42	1, 308, 620	6, 000	3, 000
Harbor	4	218	4	218					11, 700		
Yachts	9	124	9	124					9, 820		
Miscellaneous	1	19	1	19					1, 500		
No traffic report	16	1, 113	16	1, 113					51, 320		
District 6—Norfolk	211	7, 510	208	7, 037	1	64	2	409	297, 260	1, 000	12, 500
Freight	187	6, 802	185	6, 393			2	409	241, 480		12, 500
Harbor	9	451	8	387	1	64			46, 700	1, 000	
Yachts	2	25	2	25					1, 250		
Miscellaneous	1	8	1	8					130		
No traffic report	12	224	12	224					7, 700		
District 7—Savannah	257	7, 831	256	7, 821	1	10			391, 800	500	
Freight	185	6, 164	185	6, 164					244, 180		
Harbor	42	1, 238	42	1, 238					124, 720		
Yachts	9	118	8	108	1	10			6, 000	500	
Miscellaneous	5	59	5	59					2, 500		
No traffic report	16	252	16	252					14, 400		
District 8—Mobile	200	6, 764	185	5, 092	8	867	7	805	239, 310	43, 300	33, 750
Freight	156	5, 674	144	4, 114	6	771	6	789	184, 110	28, 300	32, 750
Harbor	25	559	22	447	2	96	1	16	23, 250	15, 000	1, 000
Yachts	10	94	10	94					8, 350		
No traffic report	9	437	9	437					23, 600		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 5.—OWNERSHIP BY LOCALITIES—Continued.

SAILING VESSELS—Continued.

DISTRICTS AND CLASSES.	TOTAL.		NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
	Number.	Tonnage.	Individual.		Joint stock.		Corporate.		Individual.	Joint stock.	Corporate.
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
District 9—New Orleans	187	3,807	186	3,752	1	55	....	....	$169,460	$900	....
Freight	168	3,557	168	3,557	....	....	....	....	159,420	....	....
Harbor	5	54	5	54	....	....	....	....	2,860	....	....
Yachts	3	39	3	39	....	....	....	....	2,250	....	....
Miscellaneous	2	15	2	15	....	....	....	....	1,100	....	....
No traffic report	9	142	8	87	1	55	....	....	3,830	900	....
District 10—Galveston	154	2,757	150	2,663	1	44	3	50	135,305	1,600	$5,300
Freight	123	1,851	123	1,851	....	....	....	....	115,110	....	....
Harbor	6	137	2	43	1	44	3	50	3,000	1,600	5,300
Yachts	14	205	14	205	....	....	....	....	11,065	....	....
Miscellaneous	1	38	1	38	....	....	....	....	1,500	....	....
No traffic report	10	526	10	526	....	....	....	....	4,630	....	....

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 6.—CONSTRUCTION BY CLASSES—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS AND SAILING VESSELS ALLOTTED RESPECTIVELY TO THEIR MATERIALS OF CONSTRUCTION.

ALL STEAMERS AND SAILING VESSELS.

DISTRICTS.	TOTAL.		NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
			Wood.		Composite.		Iron and steel.					
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	10, 041	2, 239, 147	9, 477	1, 801, 088	90	24, 604	474	413, 455	$119, 839, 047	$80, 915, 897	$1, 183, 120	$37, 740, 030
Steam	2, 933	837, 162	2, 448	427, 560	24	5, 365	461	404, 237	73, 554, 540	35, 991, 510	547, 800	37, 015, 230
Sail	7, 108	1, 401, 985	7, 029	1, 373, 528	66	19, 239	13	9, 218	46, 284, 507	44, 924, 387	635, 320	724, 800

STEAMERS.

PASSENGER AND FREIGHT.

DISTRICTS.	Number.	Tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	810	487, 939	612	229, 165	10	4, 317	188	254, 457	36, 989, 280	14, 988, 470	280, 000	21, 720, 810
1. Portland	56	20, 478	56	20, 478					1, 674, 350	1, 674, 350		
2. Boston	82	86, 429	67	53, 100			15	33, 329	6, 502, 620	3, 119, 120		3, 383, 500
3. New York	285	215, 090	205	82, 778	3	1, 536	77	130, 776	17, 096, 460	5, 727, 650	65, 000	11, 303, 810
4. Philadelphia	112	61, 099	70	25, 250	3	988	39	34, 861	4, 902, 200	1, 700, 200	80, 000	3, 122, 000
5. Baltimore	84	57, 562	51	24, 530	2	1, 227	31	31, 805	3, 783, 750	1, 481, 750	110, 000	2, 192, 000
6. Norfolk	55	6, 809	47	5, 057	1	96	7	1, 656	485, 000	348, 000	10, 000	127, 000
7. Savannah	66	26, 781	52	8, 899	1	470	13	17, 412	1, 805, 700	415, 200	15, 000	1, 375, 500
8. Mobile	44	6, 573	43	6, 393			1	180	367, 400	355, 400		12, 000
9. New Orleans	18	6, 402	14	2, 132			4	4, 270	317, 300	127, 300		190, 000
10. Galveston	8	716	7	548			1	168	54, 500	39, 500		15, 000

TOWING.

DISTRICTS.	Number.	Tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	1, 095	61, 359	986	52, 535	6	236	103	8, 588	10, 203, 330	8, 554, 730	21, 800	1, 626, 800
1. Portland	49	2, 782	49	2, 782					395, 900	395, 900		
2. Boston	83	4, 412	77	3, 403			6	1, 009	702, 580	553, 180		149, 400
3. New York	536	35, 122	511	32, 225	2	67	23	2, 830	5, 886, 500	5, 347, 200	5, 300	534, 000
4. Philadelphia	124	5, 857	95	4, 296			29	1, 561	1, 123, 000	799, 900		323, 100
5. Baltimore	103	4, 038	89	3, 175	2	84	12	779	698, 900	507, 800	7, 500	183, 600
6. Norfolk	58	2, 114	49	1, 495	2	85	7	534	317, 600	219, 400	9, 000	89, 200
7. Savannah	64	3, 332	50	2, 371			14	961	526, 350	363, 350		163, 000
8. Mobile	53	2, 741	42	1, 838			11	903	415, 000	231, 500		183, 500
9. New Orleans	14	500	13	489			1	11	61, 500	60, 500		1, 000
10. Galveston	11	461	11	461					76, 000	76, 000		

FERRY.

DISTRICTS.	Number.	Tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	214	98, 174	155	57, 664			59	40, 510	7, 907, 700	3, 971, 200		3, 936, 500
1. Portland	9	735	9	735					102, 500	102, 500		
2. Boston	15	5, 367	14	4, 863			1	504	365, 280	315, 280		50, 000
3. New York	142	78, 407	102	45, 857			40	32, 550	6, 363, 420	3, 223, 420		3, 140, 000
4. Philadelphia	26	9, 491	10	2, 931			16	6, 560	828, 500	155, 000		673, 500
5. Baltimore	9	1, 791	8	1, 353			1	438	86, 500	68, 500		18, 000
6. Norfolk	3	1, 268	2	810			1	458	88, 000	33, 000		55, 000
7. Savannah	9	1, 037	9	1, 037					61, 500	61, 500		
9. New Orleans	1	78	1	78					12, 000	12, 000		

YACHTS.

DISTRICTS.	Number.	Tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	170	11, 328	142	6, 111	3	353	25	4, 864	3, 520, 610	1, 735, 890	135, 000	1, 649, 720
1. Portland	2	43	2	43					11, 500	11, 500		
2. Boston	36	1, 856	33	1, 568			3	288	469, 300	375, 300		94, 000
3. New York	100	8, 215	80	3, 580	3	353	17	4, 282	2, 723, 610	1, 102, 890	135, 000	1, 485, 720
4. Philadelphia	13	529	11	506			2	23	165, 700	158, 700		7, 000
5. Baltimore	4	331	2	99			2	232	87, 000	27, 000		60, 000
6. Norfolk	1	42	1	42					5, 000	5, 000		
7. Savannah	7	154	7	154					41, 500	41, 500		
8. Mobile	4	83	3	44			1	39	8, 800	5, 800		3, 000
10. Galveston	3	75	3	75					8, 200	8, 200		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 6.—CONSTRUCTION BY CLASSES—Continued.

STEAMERS—Continued.

HARBOR.

DISTRICTS	TOTAL.		NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
			Wood.		Composite.		Iron and steel.					
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	94	13,843	86	11,302			8	2,541	$1,446,150	$1,146,150		$300,000
1. Portland	2	324	2	324					75,000	75,000		
2. Boston	11	951	11	951					102,250	102,250		
3. New York	61	8,844	59	8,571			2	273	860,900	822,900		38,000
4. Philadelphia	2	470	1	179			1	291	53,500	18,500		35,000
5. Baltimore	3	1,728					3	1,728	187,000			187,000
6. Norfolk	4	169	4	169					17,500	17,500		
7. Savannah	4	171	4	171					30,000	30,000		
9. New Orleans	2	249					2	249	40,000			40,000
10. Galveston	5	937	5	937					80,000	80,000		

MISCELLANEOUS.

DISTRICTS	Number.	Tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	153	69,127	110	24,563	5	459	38	44,105	5,451,570	1,677,170	$111,000	3,663,400
1. Portland	1	408	1	408					15,000	15,000		
2. Boston	4	1,334	4	1,334					124,000	124,000		
3. New York	98	40,740	79	19,490	4	400	15	20,850	3,603,170	1,300,770	103,000	2,199,400
4. Philadelphia	16	2,872	[illegible]	1,466			8	1,406	366,800	139,300		227,500
5. Baltimore	5	1,713	4	369			1	1,344	156,500	16,500		140,000
6. Norfolk	10	1,389	9	1,330	1	59			68,000	60,000	8,000	
7. Savannah	4	104	4	104					18,600	18,600		
9. New Orleans	14	20,519	1	62			13	20,457	1,082,000	3,000		1,079,000
10. Galveston	1	48					1	48	17,500			17,500

NO TRAFFIC REPORT.

DISTRICTS	Number.	Tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	397	95,392	357	46,220			40	49,172	8,035,900	3,917,900		4,118,000
1. Portland	16	2,148	15	1,638			1	510	236,900	186,900		50,000
2. Boston	44	7,941	42	3,291			2	4,650	767,100	348,800		418,300
3. New York	154	56,453	130	20,778			24	35,675	4,439,000	1,552,500		2,886,500
4. Philadelphia	62	10,747	55	5,994			7	4,753	1,152,550	668,550		484,000
5. Baltimore	21	4,593	18	3,663			3	930	355,400	221,800		133,600
6. Norfolk	23	1,759	22	1,265			1	494	188,500	150,700		37,800
7. Savannah	35	5,542	35	5,542					475,200	475,200		
8. Mobile	25	2,016	25	2,016					176,550	176,550		
9. New Orleans	7	3,659	5	1,499			2	2,160	199,900	92,100		107,800
10. Galveston	10	534	10	534					44,800	44,800		

SAILING VESSELS

FREIGHT.

DISTRICTS	Number.	Tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	5,229	1,260,362	5,163	1,232,597	59	19,028	7	8,737	38,777,627	37,658,057	605,070	514,500
1. Portland	1,523	430,981	1,485	418,096	37	11,437	1	1,448	12,919,607	12,560,937	303,670	55,000
2. Boston	655	285,700	647	282,082	8	3,618			8,273,500	8,141,100	132,400	
3. New York	1,213	343,868	1,206	337,899	4	1,091	[illegible]	4,878	10,672,110	10,310,810	41,300	320,000
4. Philadelphia	563	138,404	553	133,223	7	2,770	[illegible]	2,411	4,576,940	4,316,240	121,200	139,500
5. Baltimore	456	37,361	455	37,290	1	71			1,317,620	1,313,620	4,000	
6. Norfolk	187	6,802	185	6,761	2	41			253,980	251,480	2,500	
7. Savannah	185	6,164	185	6,164					244,180	244,180		
8. Mobile	156	5,674	156	5,674					245,160	245,160		
9. New Orleans	168	3,557	168	3,557					159,420	159,420		
10. Galveston	123	1,851	123	1,851					115,110	115,110		

HARBOR.

DISTRICTS	Number.	Tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	368	15,849	365	15,753	3	96			1,151,540	1,145,790	5,750	
1. Portland	11	214	11	214								
2. Boston	32	1,474	32	1,474					5,410	5,410		
3. New York	226	11,038	224	10,964	[illegible]	74			153,150	153,150		
4. Philadelphia	8	466	8	466					672,850	670,600	2,250	
5. Baltimore	4	218	4	218					84,000	84,000		
									11,700	11,700		
6. Norfolk	[illegible]	451	9	451								
7. Savannah	42	1,238	42	1,238					47,700	47,700		
8. Mobile	25	559	24	537	1	22			124,720	124,720		
9. New Orleans	5	54	5	54					39,250	35,750	3,500	
10. Galveston	6	137	6	137					2,860	2,860		
									9,900	9,900		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 6.—CONSTRUCTION BY CLASSES—Continued.

SAILING VESSELS—Continued.

YACHTS.

DISTRICTS.	TOTAL.		NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
			Wood.		Composite.		Iron and steel.					
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	628	14,428	619	13,875	3	72	6	481	$2,681,455	$2,450,655	$20,500	$210,300
1. Portland	31	418	31	418					35,690	35,690		
2. Boston	175	4,122	175	4,122					740,405	740,405		
3. New York	319	8,357	310	7,804	3	72	6	481	1,764,085	1,533,285	20,500	210,300
4. Philadelphia	56	926	56	926					102,040	102,040		
5. Baltimore	9	124	9	124					9,820	9,820		
6. Norfolk	2	25	2	25					1,250	1,250		
7. Savannah	9	118	9	118					6,500	6,500		
8. Mobile	10	94	10	94					8,350	8,350		
9. New Orleans	3	39	3	39					2,250	2,250		
10. Galveston	14	205	14	205					11,065	11,065		

MISCELLANEOUS.

DISTRICTS.	TOTAL.		NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
			Wood.		Composite.		Iron and steel.					
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	52	2,553	51	2,510	1	43			75,360	71,360	4,000	
1. Portland	3	47	3	47					850	850		
2. Boston	1	46	1	46					1,500	1,500		
3. New York	28	1,186	28	1,186					45,480	45,480		
4. Philadelphia	10	1,135	9	1,092	1	43			20,800	16,800	4,000	
5. Baltimore	1	19	1	19					1,500	1,500		
6. Norfolk	1	8	1	8					130	130		
7. Savannah	5	59	5	59					2,500	2,500		
9. New Orleans	2	15	2	15					1,100	1,100		
10. Galveston	1	38	1	38					1,500	1,500		

NO TRAFFIC REPORT.

DISTRICTS.	TOTAL.		NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
			Wood.		Composite.		Iron and steel.					
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	831	108,793	831	108,793					3,598,525	3,598,525		
1. Portland	110	28,929	110	28,929					916,865	916,865		
2. Boston	114	23,478	114	23,478					778,670	778,670		
3. New York	231	38,255	231	38,255					1,177,280	1,177,280		
4. Philadelphia	68	6,718	68	6,718					254,420	254,420		
5. Baltimore	63	2,813	63	2,813					125,420	125,420		
6. Norfolk	87	2,721	87	2,721					110,700	110,700		
7. Savannah	58	853	58	853					43,025	43,025		
8. Mobile	52	3,344	52	3,344					136,400	136,400		
9. New Orleans	36	582	36	582					28,730	28,730		
10. Galveston	12	1,100	12	1,100					27,015	27,015		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 7.—CONSTRUCTION BY LOCALITIES—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS AND SAILING VESSELS ALLOTTED RESPECTIVELY TO THEIR MATERIALS OF CONSTRUCTION.

ALL STEAMERS AND SAILING VESSELS.

DISTRICTS AND CLASSES.	TOTAL.		NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
			Wood.		Composite.		Iron and steel.					
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	10,041	2,239,147	9,477	1,801,088	90	24,604	474	413,455	$119,839,047	$80,915,897	$1,183,120	$37,740,030
Steam	2,933	837,162	2,448	427,560	24	5,365	461	404,237	73,554,540	35,991,510	547,800	37,015,230
Sail	7,108	1,401,985	7,029	1,373,528	66	19,239	13	9,218	46,284,507	44,924,387	635,320	724,800

STEAMERS.

DISTRICTS AND CLASSES.	Number.	Tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
District 1—Portland	135	26,918	134	26,408	......	......	1	510	2,511,150	2,461,150	......	50,000
Passenger and freight	56	20,478	56	20,478	......	......	......	......	1,674,350	1,674,350	......	......
Towing	49	2,782	49	2,782	......	......	......	......	395,900	395,900	......	......
Ferry	9	735	9	735	......	......	......	......	102,500	102,500	......	......
Yachts	2	43	2	43	......	......	......	......	11,500	11,500	......	......
Harbor	2	324	2	324	......	......	......	......	75,000	75,000	......	......
Miscellaneous	1	408	1	408	......	......	......	......	15,000	15,000	......	......
No traffic report	16	2,148	15	1,638	......	......	1	510	236,900	186,900	......	50,000
District 2—Boston	275	108,290	248	68,510	......	......	27	39,780	9,033,130	4,937,930	......	4,095,200
Passenger and freight	82	86,429	67	53,100	......	......	15	33,329	6,502,620	3,119,120	......	3,383,500
Towing	83	4,412	77	3,403	......	......	6	1,009	702,580	553,180	......	149,400
Ferry	15	5,367	14	4,863	......	......	1	504	365,280	315,280	......	50,000
Yachts	36	1,856	33	1,568	......	......	3	288	469,300	375,300	......	94,000
Harbor	11	951	11	951	......	......	......	......	102,250	102,250	......	......
Miscellaneous	4	1,334	4	1,334	......	......	......	......	124,000	124,000	......	......
No traffic report	44	7,941	42	3,291	......	......	2	4,650	767,100	348,800	......	418,300
District 3—New York	1,376	442,871	1,166	213,279	12	2,356	198	227,236	40,973,060	19,077,330	308,300	21,587,430
Passenger and freight	285	215,090	205	82,778	3	1,536	77	130,776	17,096,460	5,727,650	65,000	11,303,810
Towing	536	35,122	511	32,225	2	67	23	2,830	5,886,500	5,347,200	5,300	534,000
Ferry	142	78,407	102	45,857	......	......	40	32,550	6,363,420	3,223,420	......	3,140,000
Yachts	100	8,215	80	3,580	3	353	17	4,282	2,723,610	1,102,890	135,000	1,485,720
Harbor	61	8,844	59	8,571	......	......	2	273	860,900	822,900	......	38,000
Miscellaneous	98	40,740	79	19,490	4	400	15	20,850	3,603,170	1,300,770	103,000	2,199,400
No traffic report	154	56,453	130	20,778	......	......	24	35,675	4,439,000	1,552,500	......	2,886,500
District 4—Philadelphia	355	91,065	250	40,622	3	988	102	49,455	8,592,250	3,640,150	80,000	4,872,100
Passenger and freight	112	61,099	70	25,250	3	988	39	34,861	4,902,200	1,700,200	80,000	3,122,000
Towing	124	5,857	95	4,296	......	......	29	1,561	1,123,000	799,900	......	323,100
Ferry	26	9,491	10	2,931	......	......	16	6,560	828,500	155,000	......	673,500
Yachts	13	529	11	506	......	......	2	23	165,700	158,700	......	7,000
Harbor	2	470	1	179	......	......	1	291	53,500	18,500	......	35,000
Miscellaneous	16	2,872	8	1,466	......	......	8	1,406	366,800	139,300	......	227,500
No traffic report	62	10,747	55	5,994	......	......	7	4,753	1,152,550	668,550	......	484,000
District 5—Baltimore	229	71,756	172	33,189	4	1,311	53	37,256	5,355,050	2,323,350	117,500	2,914,200
Passenger and freight	84	57,562	51	24,530	2	1,227	31	31,805	3,783,750	1,481,750	110,000	2,192,000
Towing	103	4,038	89	3,175	2	84	12	779	698,900	507,800	7,500	183,600
Ferry	9	1,791	8	1,353	......	......	1	438	86,500	68,500	......	18,000
Yachts	4	331	2	99	......	......	2	232	87,000	27,000	......	60,000
Harbor	3	1,728	......	......	......	......	3	1,728	187,000	......	......	187,000
Miscellaneous	5	1,713	4	369	......	......	1	1,344	156,500	16,500	......	140,000
No traffic report	21	4,593	18	3,663	......	......	3	930	355,400	221,800	......	133,600
District 6—Norfolk	154	13,550	134	10,168	4	240	16	3,142	1,169,600	833,600	27,000	309,000
Passenger and freight	55	6,809	47	5,057	1	96	7	1,656	485,000	348,000	10,000	127,000
Towing	58	2,114	49	1,495	2	85	7	534	317,600	219,400	9,000	89,200
Ferry	3	1,268	2	810	......	......	1	458	88,000	33,000	......	55,000
Yachts	1	42	1	42	......	......	......	......	5,000	5,000	......	......
Harbor	4	169	4	169	......	......	......	......	17,500	17,500	......	......
Miscellaneous	10	1,389	9	1,330	1	59	......	......	68,000	60,000	8,000	......
No traffic report	23	1,759	22	1,265	......	......	1	494	188.500	150,700	......	37,800
District 7—Savannah	189	37,121	161	18,278	1	470	27	18,373	2,958,850	1,405,350	15,000	1,538,500
Passenger and freight	66	26,781	52	8,899	1	470	13	17,412	1,805,700	415,200	15,000	1,375,500
Towing	64	3,332	50	2,371	......	......	14	961	526,350	363,350	......	163,000
Ferry	9	1,037	9	1,037	......	......	......	......	61,500	61,500	......	......
Yachts	7	154	7	154	......	......	......	......	41,500	41,500	......	......
Harbor	4	171	4	171	......	......	......	......	30,000	30,000	......	......
Miscellaneous	4	104	4	104	......	......	......	......	18,600	18,600	......	......
No traffic report	35	5,542	35	5,542	......	......	......	......	475,200	475,200	......	......

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 7.—CONSTRUCTION BY LOCALITIES—Continued.

STEAMERS—Continued.

DISTRICTS AND CLASSES.	TOTAL.		NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
	Number.	Tonnage.	Wood.		Composite.		Iron and steel.		Total valuation.	Wood.	Composite.	Iron and steel.
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.				
District 8—Mobile	126	11,413	113	10,291			13	1,122	$967,750	$769,250		$198,500
Passenger and freight	44	6,573	43	6,393			1	180	367,400	355,400		12,000
Towing	53	2,741	42	1,838			11	903	415,000	231,500		183,500
Yachts	4	83	3	44			1	39	8,800	5,800		3,000
No traffic report	25	2,016	25	2,016					176,550	176,550		
District 9—New Orleans	56	31,407	34	4,260			22	27,147	1,712,700	294,900		1,417,800
Passenger and freight	18	6,402	14	2,132			4	4,270	317,300	127,300		190,000
Towing	14	500	13	489			1	11	61,500	60,500		1,000
Ferry	1	78	1	78					12,000	12,000		
Harbor	2	249					2	249	40,000			40,000
Miscellaneous	14	20,519	1	62			13	20,457	1,082,000	3,000		1,079,000
No traffic report	7	3,659	5	1,499			2	2,160	199,900	92,100		107,800
District 10—Galveston	38	2,771	36	2,555			2	216	281,000	248,500		32,500
Passenger and freight	8	716	7	548			1	168	54,500	39,500		15,000
Towing	11	461	11	461					76,000	76,000		
Yachts	3	75	3	75					8,200	8,200		
Harbor	5	937	5	937					80,000	80,000		
Miscellaneous	1	48					1	48	17,500			17,500
No traffic report	10	534	10	534					44,800	44,800		

SAILING VESSELS.

DISTRICTS AND CLASSES.	TOTAL.		NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
	Number.	Tonnage.	Wood.		Composite.		Iron and steel.		Total valuation.	Wood.	Composite.	Iron and steel.
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.				
District 1—Portland	1,678	460,589	1,640	447,704	37	11,437	1	1,448	13,878,422	13,519,752	$303,670	55,000
Freight	1,523	430,981	1,485	418,096	37	11,437	1	1,448	12,919,607	12,560,937	303,670	55,000
Harbor	11	214	11	214					5,410	5,410		
Yachts	31	418	31	418					35,690	35,690		
Miscellaneous	3	47	3	47					850	850		
No traffic report	110	28,929	110	28,929					916,865	916,865		
District 2—Boston	977	314,820	969	311,202	8	3,618			9,947,225	9,814,825	132,400	
Freight	655	285,700	647	282,082	8	3,618			8,273,500	8,141,100	132,400	
Harbor	32	1,474	32	1,474					153,150	153,150		
Yachts	175	4,122	175	4,122					740,405	740,405		
Miscellaneous	1	46	1	46					1,500	1,500		
No traffic report	114	23,478	114	23,478					778,670	778,670		
District 3—New York	2,017	402,704	1,999	396,108	9	1,237	9	5,359	14,331,805	13,737,455	64,050	530,300
Freight	1,213	343,868	1,206	337,899	4	1,091	3	4,878	10,672,110	10,310,810	41,300	320,000
Harbor	226	11,038	224	10,964	2	74			672,850	670,600	2,250	
Yachts	319	8,357	310	7,804	3	72	6	481	1,764,085	1,533,285	20,500	210,300
Miscellaneous	28	1,186	28	1,186					45,480	45,480		
No traffic report	231	38,255	231	38,255					1,177,280	1,177,280		
District 4—Philadelphia	705	147,649	694	142,425	8	2,813	3	2,411	5,038,200	4,773,500	125,200	139,500
Freight	563	138,404	553	133,223	7	2,770	3	2,411	4,576,940	4,316,240	121,200	139,500
Harbor	8	466	8	466					84,000	84,000		
Yachts	56	926	56	926					102,040	102,040		
Miscellaneous	10	1,135	9	1,092	1	43			20,800	16,800	4,000	
No traffic report	68	6,718	68	6,718					254,420	254,420		
District 5—Baltimore	533	40,535	532	40,464	1	71			1,466,060	1,462,060	4,000	
Freight	456	37,361	455	37,290	1	71			1,317,620	1,313,620	4,000	
Harbor	4	218	4	218					11,700	11,700		
Yachts	9	124	9	124					9,820	9,820		
Miscellaneous	1	19	1	19					1,500	1,500		
No traffic report	63	2,813	63	2,813					125,420	125,420		
District 6—Norfolk	286	10,007	284	9,966	2	41			413,760	411,260	2,500	
Freight	187	6,802	185	6,761	2	41			253,980	251,480	2,500	
Harbor	9	451	9	451					47,700	47,700		
Yachts	2	25	2	25					1,250	1,250		
Miscellaneous	1	8	1	8					130	130		
No traffic report	87	2,721	87	2,721					110,700	110,700		
District 7—Savannah	299	8,432	299	8,432					420,925	420,925		
Freight	185	6,164	185	6,164					244,180	244,180		
Harbor	42	1,238	42	1,238					124,720	124,720		
Yachts	9	118	9	118					6,500	6,500		
Miscellaneous	5	59	5	59					2,500	2,500		
No traffic report	58	853	58	853					43,025	43,025		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 7.—CONSTRUCTION BY LOCALITIES—Continued.

SAILING VESSELS—Continued.

DISTRICTS AND CLASSES.	TOTAL		NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
			Wood.		Composite.		Iron and steel.					
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
District 8—Mobile	243	9, 671	242	9, 649	1	22			$429, 160	$425, 660	$3, 500	
Freight	156	5, 674	156	5, 674					245, 160	245, 160		
Harbor	25	559	24	537	1	22			39, 250	35, 750	3, 500	
Yachts	10	94	10	94					8, 350	8, 350		
No traffic report	52	3, 344	52	3, 344					136, 400	136, 400		
District 9—New Orleans	214	4, 247	214	4, 247					194, 360	194, 360		
Freight	168	3, 557	168	3, 557					159, 420	159, 420		
Harbor	5	54	5	54					2, 860	2, 860		
Yachts	3	39	3	39					2, 250	2, 250		
Miscellaneous	2	15	2	15					1, 100	1, 100		
No traffic report	36	582	36	582					28, 730	28, 730		
District 10—Galveston	156	3, 331	156	3, 331					164, 590	164, 590		
Freight	123	1, 851	123	1, 851					115, 110	115, 110		
Harbor	6	137	6	137					9, 900	9, 900		
Yachts	14	205	14	205					11, 065	11, 065		
Miscellaneous	1	38	1	38					1, 500	1, 500		
No traffic report	12	1, 100	12	1, 100					27, 015	27, 015		

TRAFFIC OPERATIONS.

TABLE 8.—TRAFFIC IN GENERAL—TRIPS, MILES COVERED, PASSENGERS CARRIED, AND TONS OF FREIGHT MOVED BY THE PASSENGER AND FREIGHT CARRYING VESSELS, EXCLUSIVE OF FERRYBOATS, OF THE ATLANTIC COAST AND GULF OF MEXICO.

DISTRICTS.	ALL CRAFT.				STEAMERS.				SAILING VESSELS.			UNRIGGED CRAFT.
	Trips.	Miles.	Freight. (Tons.)	Passengers.	Trips.	Miles.	Freight. (Tons.)	Passengers.	Trips.	Miles.	Freight. (Tons.)	Freight. (Tons.)
Total	384, 888	73, 126, 338	80, 695, 665	11, 581, 446	157, 189	22, 897, 838	28, 791, 438	11, 581, 446	227, 699	50, 228, 500	39, 801, 533	12, 102, 694
1 Portland	46, 738	7, 571, 223	6, 125, 437	968, 604	16, 896	1, 101, 263	1, 177, 599	968, 604	29, 842	6, 469, 960	4, 731, 379	216, 459
2. Boston	46, 175	10, 949, 160	12, 353, 533	2, 119, 296	20, 561	3, 419, 580	3, 885, 454	2, 119, 296	25, 614	7, 529, 580	7, 260, 053	1, 208, 026
3. New York	96, 638	25, 342, 874	35, 543, 632	5, 832, 914	25, 652	7, 774, 204	13, 301, 662	5, 832, 914	70, 986	17, 568, 670	12, 833, 857	9, 408, 113
4. Philadelphia	20, 134	6, 019, 554	6, 894, 909	1, 448, 986	4, 648	1, 624, 064	1, 729, 539	1, 448, 986	15, 486	4, 395, 490	4, 927, 123	238, 247
5. Baltimore	50, 206	6, 241, 668	5, 823, 741	854, 464	28, 170	2, 255, 198	2, 292, 355	854, 464	22, 036	3, 986, 470	3, 450, 372	81, 014
6. Norfolk	27, 900	4, 412, 405	5, 129, 690	89, 066	16, 980	1, 865, 205	2, 290, 751	89, 066	10, 920	2, 547, 200	2, 704, 717	134, 222
7. Savannah	49, 169	7, 371, 090	5, 841, 148	152, 228	25, 533	2, 991, 370	2, 681, 398	152, 228	23, 636	4, 379, 720	2, 433, 097	726, 653
8. Mobile	22, 592	2, 238, 830	1, 076, 945	90, 956	12, 166	737, 860	375, 789	90, 956	10, 426	1, 500, 970	651, 176	49, 980
9. New Orleans	14, 302	1, 333, 434	1, 184, 206	18, 944	3, 438	324, 204	568, 259	18, 944	10, 864	1, 009, 230	595, 967	19, 980
10. Galveston	11, 034	1, 646, 100	722, 424	5, 988	3, 145	804, 890	488, 632	5, 988	7, 889	841, 210	213, 792	20, 000

TABLE 9.—FREIGHT TRAFFIC BY COMMODITIES—AMOUNT OF EACH SELECTED COMMODITY OF THE TOTAL FREIGHT MOVED BY THE PASSENGER AND FREIGHT CARRYING VESSELS, EXCLUSIVE OF FERRYBOATS.

ALL CRAFT.

DISTRICTS.	COMMODITIES. (TONS.)						
	Total.	Coal.	Lumber.	Stone.	Ice.	Cement, brick, and lime.	All other commodities.
All districts	80, 695, 665	23, 775, 938	10, 887, 627	1, 991, 848	4, 026, 499	4, 149, 359	35, 864, 394
STEAMERS.							
Total	28, 791, 438	5, 508, 722	1, 712, 432	190, 825	446, 507	546, 271	20, 386, 681
1. Portland	1, 177, 599	518, 763	124, 847	44, 916	46, 209	31, 142	411, 722
2. Boston	3, 885, 454	1, 333, 572	42, 921	11, 365	4, 966	33, 706	2, 458, 924
3. New York	13, 301, 662	3, 083, 246	275, 185	106, 827	343, 994	451, 129	9, 041, 281
4. Philadelphia	1, 729, 539	263, 374	21, 606	7, 043	5, 693	2, 615	1, 429, 208
5. Baltimore	2, 292, 355	238, 498	56, 050	14, 957	2, 874	6, 412	1, 973, 564
6. Norfolk	2, 290, 751	58, 003	341, 980	5, 168	9, 912	12, 838	1, 862, 850
7. Savannah	2, 681, 398	7, 098	367, 266	266	31, 970	4, 042	2, 270, 756
8. Mobile	375, 789	724	110, 549	283	881	2, 514	260, 838
9. New Orleans	568, 259	......	369, 141	......	......	1, 725	197, 393
10. Galveston	488, 632	5, 444	2, 887	......	8	148	480, 145
SAILING VESSELS.							
Total	39, 801, 533	12, 980, 044	8, 883, 253	1, 549, 237	2, 528, 490	2, 413, 533	11, 446, 976
1. Portland	4, 731, 379	1, 215, 747	1, 134, 628	401, 431	1, 122, 399	354, 894	502, 280
2. Boston	7, 260, 053	3, 351, 824	1, 786, 467	396, 442	133, 580	206, 959	1, 384, 781
3. New York	12, 833, 857	3, 547, 746	1, 711, 369	558, 843	205, 915	1, 692, 522	5, 117, 462
4. Philadelphia	4, 927, 123	1, 183, 258	1, 578, 711	108, 672	567, 955	55, 349	1, 433, 178
5. Baltimore	3, 450, 372	1, 760, 524	405, 951	29, 679	353, 850	29, 109	871, 259
6. Norfolk	2, 704, 717	1, 460, 640	432, 221	12, 542	77, 805	19, 846	701, 663
7. Savannah	2, 433, 097	376, 343	1, 135, 267	20, 819	51, 782	14, 489	834, 397
8. Mobile	651, 176	53, 724	426, 350	9, 668	14, 905	3, 606	142, 923
9. New Orleans	595, 967	12, 523	201, 400	7, 121	299	15, 033	359, 591
10. Galveston	213, 792	17, 715	70, 889	4, 020	......	21, 726	99, 442
UNRIGGED CRAFT.							
Total	12, 102, 694	5, 287, 172	291, 942	251, 786	1, 051, 502	1, 189, 555	4, 030, 737
1. Portland	216, 459	167, 888	......	10, 780	37, 791	......	......
2. Boston	1, 208, 026	1, 150, 213	14, 700	8, 925	2, 400	14, 455	17, 333
3. New York	9, 408, 113	3, 754, 339	142, 565	175, 175	998, 815	1, 174, 973	3, 162, 306
4. Philadelphia	238, 247	105, 114	10, 300	......	......	57	122, 776
5. Baltimore	81, 014	11, 135	21, 773	36, 906	......	......	11, 200
6. Norfolk	134, 222	98, 483	3, 500	......	12, 496	......	19, 743
7. Savannah	726, 653	......	29, 204	......	......	70	697, 379
8. Mobile	49, 980	......	49, 980	......	......	......	......
9. New Orleans	19, 980	......	19, 980	......	......	......	......
10. Galveston	20, 000	......	......	20, 000	......	......	......

TRAFFIC OPERATIONS—Continued.

TABLE 10.—INTERDISTRICT MOVEMENT, FREIGHT AND MILEAGE—AMOUNT OF EACH SELECTED COMMODITY MOVED WITHIN OR BETWEEN TRAFFIC DISTRICTS BY THE PASSENGER AND FREIGHT CARRYING VESSELS, EXCLUSIVE OF FERRYBOATS, AND THE NUMBER OF MILES COVERED IN THE TRANSPORTATION OF SUCH FREIGHT.

SUMMARY.

INTERDISTRICT MOVEMENT.		COMMODITIES. (TONS.)							Miles covered.
From—	To—	Total.	Coal.	Lumber.	Stone.	Ice.	Cement, brick, and lime.	All other commodities.	
All districts		80,695,665	23,775,938	10,887,627	1,991,848	4,026,499	4,149,359	35,864,394	73,126,338
DISTRICT 1—PORTLAND.									
Total		5,988,284	1,902,398	1,180,856	454,460	1,194,122	385,817	870,631	7,256,508
Portland	1. Portland	483,689	10,932	67,945	115,771	17,089	35,883	236,069	1,085,833
Do	2. Boston	649,008	34	292,192	70,158	8,801	128,683	149,140	1,407,330
Do	3. New York	1,164,268		565,103	162,588	177,384	165,800	93,393	1,405,980
Do	4. Philadelphia	605,886		42,756	60,228	497,177	768	4,907	457,564
Do	5. Baltimore	360,788		17,840	15,293	324,708	928	2,019	246,665
Do	6. Norfolk	112,793		6,580	5,105	87,549	10,889	2,670	76,135
Do	7. Savannah	78,434		1,670	8,210	64,530	1,040	2,984	108,260
Do	8. Mobile	5,860				4,607		1,253	41,372
Do	12. Foreign	114,049		78,619	2,667	12,277	219	20,267	263,115
All districts	1. Portland	2,413,559	1,891,432	108,151	14,440		41,607	357,929	2,164,254
DISTRICT 2—BOSTON.									
Total		11,990,935	5,835,361	1,786,264	415,484	124,790	255,120	3,573,916	9,995,795
Boston	2. Boston	465,815	5,465	5,563	202,636	500	5,417	246,234	643,670
Do	1. Portland	218,069	12,184	187	2,083		8,841	194,774	440,320
Do	3. New York	920,291		17,188	92,112	3,453	3,320	804,218	429,765
Do	4. Philadelphia	254,411		4,943	28,043	57,611	360	163,454	168,332
Do	5. Baltimore	215,289			3,055	27,436		184,798	194,750
Do	6. Norfolk	10,278			517	4,101	3,739	1,921	12,910
Do	7. Savannah	78,595			612	4,565	213	73,205	275,819
Do	8. Mobile	4,227				2,167		2,060	10,506
Do	9. New Orleans	2,267						2,267	3,667
Do	10. Galveston	667						667	8,920
Do	12. Foreign	157,819		38,570	1,248	16,156		101,845	392,868
All districts	2. Boston	9,663,207	5,817,712	1,719,813	85,178	8,801	233,230	1,798,473	7,414,268
DISTRICT 3—NEW YORK.									
Total		32,713,210	10,147,444	1,870,711	830,649	1,536,210	3,169,669	15,158,527	19,777,154
New York	3. New York	17,817,212	4,439,504	202,925	503,635	1,336,388	2,672,816	8,661,944	5,571,914
Do	1. Portland	1,315,246	1,140,674	2,980	11,960		32,766	126,866	1,018,390
Do	2. Boston	4,410,588	3,329,862	23,067	13,553		103,107	940,999	2,255,825
Do	4. Philadelphia	163,005		634	8,744	939	18,503	134,185	109,482
Do	5. Baltimore	100,583	3,237		2,500		5,304	89,542	72,320
Do	6. Norfolk	422,329	43,099		2,670	855	5,853	369,852	370,970
Do	7. Savannah	567,141	74,125		8,997	4,677	9,957	469,385	681,980
Do	8. Mobile	17,553	3,892		893		780	11,988	38,042
Do	9. New Orleans	12,653	3,058		3,840		48	5,707	22,650
Do	10. Galveston	186,666	5,301		1,600		1,779	177,986	407,162
Do	11. Pacific coast	171,985	7,627					164,358	308,100
Do	12. Foreign	1,107,142	170,550	57,737	2,361	6,587	510	869,397	1,679,011
All districts	3. New York	6,421,107	926,515	1,583,368	269,896	186,764	318,246	3,136,318	7,241,302
DISTRICT 4—PHILADELPHIA.									
Total		6,418,448	1,497,874	1,600,231	115,695	569,988	56,304	2,578,356	5,415,689
Philadelphia	4. Philadelphia	938,024	88,032	14,793	13,427	93	28,879	792,800	1,034,634
Do	1. Portland	306,740	301,278		397			5,065	238,046
Do	2. Boston	2,003,406	649,261	1,167,540			1,440	185,165	1,141,448
Do	3. New York	380,043	147,165	3,866	808			228,204	283,838
Do	5. Baltimore	67,878	11,484	634	453		3,800	51,507	97,130
Do	6. Norfolk	166,932	53,958			5,428	573	106,973	146,370
Do	7. Savannah	293,057	176,302		2,787	2,146		111,822	302,700
Do	8. Mobile	9,619	5,410			2,934		1,275	13,100
Do	9. New Orleans	5,885	5,885						8,490
Do	10. Galveston	26,670	3,093	734				22,843	60,246
Do	11. Pacific coast	15,728							

TRAFFIC OPERATIONS—Continued.

TABLE 10.—INTERDISTRICT MOVEMENT, FREIGHT AND MILEAGE—Continued.

DISTRICT 5—BALTIMORE.

INTERDISTRICT MOVEMENT.		COMMODITIES. (TONS.)							Miles covered.
From—	To—	Total.	Coal.	Lumber.	Stone.	Ice.	Cement, brick, and lime.	All other commodities.	
Total		5, 608, 839	1, 956, 835	467, 403	80, 032	356, 724	32, 173	2, 715, 672	5, 838, 703
Baltimore	5. Baltimore	899, 656	29, 644	40, 089	54, 004	620	7, 254	768, 045	1, 580, 938
Do	1. Portland	218, 046	213, 939	800				3, 307	140, 735
Do	2. Boston	1, 234, 089	1, 171, 466					62, 623	874, 700
Do	3. New York	373, 744	295, 507	416	2, 067			75, 754	272, 880
Do	4. Philadelphia	74, 442		9, 176				65, 266	96, 330
Do	6. Norfolk	409, 655	48, 792	4, 841	127	120	5, 710	350, 065	520, 226
Do	7. Savannah	431, 321	102, 445	5, 792	200	3, 793	1, 040	318, 051	281, 656
Do	8. Mobile	9, 630	1, 195				11	8, 424	6, 842
Do	10. Galveston	8, 148	8, 148						27, 080
Do	11. Pacific coast	32, 127	32, 127						24, 134
Do	12. Foreign	85, 261	21, 195	1, 576				62, 490	175, 103
All districts	5. Baltimore	1, 832, 720	32, 377	404, 713	23, 634	352, 191	18, 158	1, 001, 647	1, 838, 079

DISTRICT 6—NORFOLK.

From—	To—	Total.	Coal.	Lumber.	Stone.	Ice.	Cement, brick, and lime.	All other commodities.	Miles covered.
Total		5, 075, 198	1, 593, 783	776, 901	17, 710	100, 213	32, 684	2, 553, 907	4, 355, 895
Norfolk	6. Norfolk	731, 767	2, 689	145, 044	827	767	1, 726	580, 714	453, 565
Do	1. Portland	232, 673	223, 357	5, 096				4, 220	134, 065
Do	2. Boston	920, 301	666, 841	63, 163	1, 467			188, 830	512, 300
Do	3. New York	973, 857	483, 843	180, 003	5, 120			304, 891	947, 534
Do	4. Philadelphia	236, 639	2, 134	71, 541	788			162, 176	195, 660
Do	5. Baltimore	451, 803	17, 656	198, 287	823	47	3, 850	231. 140	637, 444
Do	7. Savannah	129, 250	28, 071	388	266	1, 346	344	98, 835	126, 202
Do	12. Foreign	41, 881	23, 343	800				17, 738	42, 867
All districts	6. Norfolk	1, 357, 027	145, 849	112, 579	8, 419	98, 053	26, 764	965, 363	1. 306, 258

DISTRICT 7—SAVANNAH.

From—	To—	Total.	Coal.	Lumber.	Stone.	Ice.	Cement, brick, and lime.	All other commodities.	Miles covered.
Total		5, 769, 609	383, 441	1, 479, 630	21, 085	83, 752	18, 601	3, 783, 100	7, 181, 705
Savannah	7 Savannah	1, 630, 146	2, 489	119, 196	13	2, 637	4, 125	1, 501, 686	2, 150, 060
Do	1. Portland	99, 014		98, 421				593	136, 960
Do	2. Boston	205, 539		120, 434				85. 105	599, 061
Do	3. New York	1, 050, 884		570, 340			681	479, 863	1, 291, 280
Do	4. Philadelphia	363, 935		233, 107			264	130, 564	379, 300
Do	5. Baltimore	537, 724		172, 016			928	364, 780	381. 074
Do	6. Norfolk	222, 429		101, 158				121, 271	165, 998
Do	8. Mobile	5, 301	9			58	9	5, 225	45, 010
Do	9. New Orleans	234						234	20, 730
Do	12. Foreign	59, 075		52, 107				6, 968	155, 960
All districts	7. Savannah	1, 595, 328	380, 943	12, 851	21, 072	81, 057	12, 594	1, 086, 811	1, 852, 672

DISTRICT 8—MOBILE.

From—	To—	Total.	Coal.	Lumber.	Stone.	Ice.	Cement, brick, and lime.	All other commodities.	Miles covered.
Total		1, 003, 821	34, 338	546, 254	8, 301	13, 466	6, 120	395, 342	2, 081, 010
Mobile	8. Mobile	488, 341	715	191, 005	3, 891	1, 113	3, 532	288, 085	1, 034, 080
Do	1. Portland	667		667					4, 138
Do	2. Boston	33, 398		33, 398					61, 274
Do	3. New York	67, 055		65. 882				1, 173	147, 218
Do	4. Philadelphia	38, 741		34, 498				4, 243	53, 860
Do	5. Baltimore	1, 141		1, 141					1, 368
Do	7. Savannah	5, 066		5, 001				65	42, 630
Do	9. New Orleans	208, 574		162, 273			1, 788	44, 513	346. 686
Do	10. Galveston	3, 614		1, 264	1, 200			1, 150	27, 370
Do	12. Foreign	68, 013	20, 110	40, 625	1, 650	2. 320		3. 308	148, 371
All districts	8. Mobile	89, 211	13, 513	10, 500	1, 560	10, 033	800	52, 805	214, 015

DISTRICT 9—NEW ORLEANS.

From—	To—	Total.	Coal.	Lumber.	Stone.	Ice.	Cement, brick, and lime.	All other commodities.	Miles covered.
Total		1, 144, 754	12, 523	589, 854	5, 814	299	14, 791	521, 473	1, 288, 269
New Orleans	9. New Orleans	788, 503		368, 808		32	10, 941	408, 722	539, 514
Do	2. Boston	2, 099		765				1, 334	1, 833
Do	8. Mobile	31, 124	3, 007	10, 500	667	267		16. 683	41, 134
Do	10. Galveston	40, 447	573	34, 388			47	5, 439	193, 590
Do	12. Foreign	13, 214		667			1. 967	10, 580	14, 682
All districts	9. New Orleans	269, 367	8, 943	174, 726	5, 147		1, 836	78, 715	497, 51

TRAFFIC OPERATIONS—Continued.

TABLE 10.—INTERDISTRICT MOVEMENT, FREIGHT AND MILEAGE—Continued.

DISTRICT 10—GALVESTON.

INTERDISTRICT MOVEMENT.		COMMODITIES. (TONS.)							Miles covered.
From—	To—	Total.	Coal.	Lumber.	Stone.	Ice.	Cement, brick, and lime.	All other commodities.	
Total		717,381	23,159	70,879	24,020	8	21,874	577,441	1,629,890
Galveston	10. Galveston	252,347	6,044	10,507	21,220	8	20,048	194,520	432,560
Do	3. New York	172,753		3,013				169,740	363,688
Do	4. Philadelphia	6,724		5,623				1,101	16,294
Do	8. Mobile	786						786	5,760
Do	9. New Orleans	13,516		12,453				1,063	64,810
Do	12. Foreign	4,244		2,897				1,347	11,292
All districts	10. Galveston	267,011	17,115	36,386	2,800		1,826	208,884	735,486

DISTRICT 11—PACIFIC COAST.

From—	To—	Total.	Coal.	Lumber.	Stone.	Ice.	Cement, brick, and lime.	All other commodities.	Miles covered.
Total		307,597	39,754					267,843	561,970
Pacific coast	2. Boston	2,134						2,134	17,500
Do	3. New York	79,089						79,089	154,050
Do	4. Philadelphia	2,934						2,934	15,374
Do	5. Baltimore	3,600						3,600	12,066
All districts	11. Pacific coast	219,840	39,754					180,086	362,980

DISTRICT 12—FOREIGN.

From—	To—	Total.	Coal.	Lumber.	Stone.	Ice.	Cement, brick, and lime.	All other commodities.	Miles covered.
Total		3,957,589	349,028	518,644	18,598	46,927	156,206	2,868,186	7,743,750
Foreign	12. Foreign	233,083	59,710	23,054	634			149,685	1,479,490
Do	1. Portland	23,104						23,104	51,600
Do	2. Boston	202,645	248	19,254				183,143	542,997
Do	3. New York	1,239,123		177,557	7,201	5,927	148,445	899,993	1,945,069
Do	4. Philadelphia	246,379		8,296	20	740	1,717	235,606	284,593
Do	5. Baltimore	93,914		14,795	1,510		3,348	74,261	191,662
Do	6. Norfolk	12,611						12,611	13,643
Do	7. Savannah	12,464						12,464	33,425
Do	8. Mobile	5,111						5,111	12,249
Do	9. New Orleans	26,238			1,307			24,931	30,483
Do	10. Galveston	799						799	2,118
All districts	12. Foreign	1,862,118	289,070	275,688	7,926	40,260	2,696	1,246,478	3,156,421

EARNINGS AND EXPENSES.

TABLE 11.—FINANCIAL ACCOUNT IN GENERAL—GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF THE PASSENGER AND FREIGHT CARRYING VESSELS, EXCLUSIVE OF FERRYBOATS, OF THE ATLANTIC COAST AND GULF OF MEXICO.

DISTRICTS.	TOTAL.			STEAMERS.			SAILING VESSELS.			UNRIGGED CRAFT.		
	Gross earnings.	Expenses.	Net earnings.	Gross earnings.	Expenses.	Net earnings.	Gross earnings.	Expenses.	Net earnings.	Gross earnings.	Expenses.	Net earnings.
Total	$70, 843, 633	$54, 080, 214	$16, 763, 419	$30, 112, 259	$23, 075, 441	$7, 036, 818	$31, 700, 178	$23, 420, 855	$8, 279, 323	$9, 031, 196	$7, 583, 918	$1, 447, 278
1. Portland	11, 665, 006	8, 775, 234	2, 889, 772	1, 394, 214	1, 125, 757	268, 457	9, 846, 292	7, 297, 317	2, 548, 975	424, 500	352, 160	72, 340
2. Boston	13, 749, 837	10, 582, 826	3, 167, 011	6, 157, 986	4, 892, 136	1, 265, 850	7, 023, 663	5, 230, 381	1, 793, 287	568, 183	460, 309	107, 876
3. New York	26, 997, 875	20, 936, 832	6, 061, 043	11, 638, 286	8, 731, 193	2, 907, 093	8, 479, 623	6, 343, 796	2, 135, 827	6, 879, 966	5, 861, 843	1, 018, 123
4. Philadelphia	8, 051, 133	5, 704, 000	2, 347, 133	2, 979, 166	2, 109, 551	869, 615	4, 359, 155	3, 027, 063	1, 332, 092	712, 812	567, 386	145, 426
5. Baltimore	4, 379, 962	3, 279, 283	1, 100, 679	3, 239, 950	2, 436, 819	803, 131	957, 379	708, 901	248, 478	182, 633	133, 563	49, 070
6. Norfolk	496, 634	371, 801	124, 833	270, 550	197, 801	72, 749	160, 184	119, 436	40, 748	65, 900	54, 564	11, 336
7. Savannah	2, 324, 335	1, 997, 291	327, 044	2, 029, 111	1, 760, 323	268, 788	192, 266	154, 209	38, 057	102, 958	82, 759	20, 199
8. Mobile	998, 713	812, 355	186, 358	647, 882	542, 069	105, 813	275, 387	213, 632	61, 755	75, 444	56, 654	18, 790
9. New Orleans	1, 943, 309	1, 439, 731	503, 578	1, 685, 854	1, 231, 311	454, 543	254, 655	206, 420	48, 235	2, 800	2, 000	800
10. Galveston	236, 829	180, 861	55, 968	69, 260	48, 481	20, 779	151, 569	119, 700	31, 869	16, 000	12, 680	3, 320

TABLE 12.—RUNNING AND SHORE EXPENSES—ANALYSIS OF THE EXPENSES OF THE PASSENGER AND FREIGHT CARRYING VESSELS, EXCLUSIVE OF FERRYBOATS.

DISTRICTS.	ALL CRAFT.				STEAMERS.			
	Number of vessels.	Expenses.			Number of vessels.	Expenses.		
		Total.	Running.	Shore.		Total.	Running.	Shore.
Total	9, 464	$54, 080, 214	$47, 046, 211	$7, 034, 003	810	$23, 075, 441	$19, 448, 817	$3, 626, 624
1. Portland	1, 734	8, 775, 234	7, 889. 782	885, 452	56	1, 125, 757	1, 071, 927	53, 830
2. Boston	951	10, 582, 826	9, 643, 349	939, 477	82	4, 892, 136	4, 497, 778	394, 358
3. New York	3, 310	20, 936, 832	17, 537, 122	3, 399, 710	285	8, 731, 193	7, 025, 708	1, 705, 485
4. Philadelphia	1, 171	5, 704, 000	5, 225, 726	478, 274	112	2, 109, 551	1, 879, 888	229, 663
5. Baltimore	700	3, 279, 283	2, 762, 733	516, 550	84	2, 436, 819	1, 977, 213	459, 606
6. Norfolk	363	371, 801	330, 117	41, 684	55	197, 801	162, 907	34, 894
7. Savannah	543	1, 997, 291	1, 788, 036	209, 255	66	1, 760, 323	1, 560, 607	199, 716
8. Mobile	311	812, 355	757, 246	55, 109	44	542, 069	495, 956	46, 113
9. New Orleans	199	1, 439, 731	938, 156	501, 575	18	1, 231, 311	734, 026	497, 285
10. Galveston	182	180, 861	173, 944	6, 917	8	48, 481	42, 807	5, 674

DISTRICTS.	SAILING VESSELS.				UNRIGGED CRAFT.			
	Number of vessels.	Expenses.			Number of vessels.	Expenses.		
		Total.	Running.	Shore.		Total.	Running.	Shore.
Total	5, 229	$23, 420, 855	$21, 120, 368	$2, 300, 487	3, 425	$7, 583. 918	$6, 477, 026	$1, 106, 892
1. Portland	1, 523	7, 297, 317	6, 537, 907	759, 410	155	352, 160	279. 948	72, 212
2. Boston	655	5, 230, 381	4, 731, 037	499, 344	214	460, 309	414, 534	45, 775
3. New York	1, 213	6, 343, 796	5, 606, 961	736, 835	1, 812	5, 861, 843	4, 904, 453	957, 390
4. Philadelphia	563	3, 027, 063	2, 792, 930	234, 133	496	567, 386	552, 908	14, 478
5. Baltimore	456	708, 901	657, 281	51, 620	160	133, 563	128, 239	5, 324
6. Norfolk	187	119, 436	115, 690	3, 746	121	54, 564	51, 520	3, 044
7. Savannah	185	154, 209	149, 685	4, 524	292	82, 759	77, 744	5, 015
8. Mobile	156	213, 632	208, 290	5, 342	111	56, 654	53, 000	3, 654
9. New Orleans	168	206, 420	202, 130	4, 290	13	2, 000	2, 000	....
10. Galveston	123	119, 700	118, 457	1, 243	51	12, 680	12, 680	....

EARNINGS AND EXPENSES—Continued.

TABLE **13.**—EMPLOYÉS AND WAGES BY COAST TOTALS—TOTAL WAGES PAID DURING THE YEAR TO EMPLOYÉS MAKING ORDINARY CREWS ON THE PASSENGER AND FREIGHT CARRYING VESSELS, EXCLUSIVE OF FERRYBOATS.

DISTRICTS.	ALL CRAFT.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number making ordinary crews.	Wages paid during year.	Number making ordinary crews.	Total wages paid during year.	Number making ordinary crews.	Total wages paid during year.	Number making ordinary crews.	Total wages paid during year.
Total	52,659	$16,333,338	15,827	$5.868,525	31,957	$8,419.657	4,875	$2,045,156
1. Portland	13,574	2,916,063	841	298,720	12,550	2,567,183	183	50,160
2. Boston	7,932	2,824,930	2,672	1,058,953	5,025	1,698,494	235	67,483
3. New York	15,944	6,324,363	5,563	2,341,329	6,943	2,375,328	3,438	1,607,706
4. Philadelphia	5,663	1,814,655	2,142	758,926	3,108	932,157	413	123,572
5. Baltimore	3,819	944,464	1,696	514,868	1,908	351,879	215	77,717
6. Norfolk	1,171	253,955	488	131,477	536	89,240	147	33,238
7. Savannah	1,600	466,395	900	323,249	569	97,140	131	46,006
8. Mobile	1,517	389,605	945	240,997	500	119,456	72	29,152
9. New Orleans	1,041	303,456	500	172,796	538	129,220	3	1,440
10. Galveston	398	95,452	80	27,210	280	59,560	38	8,682

TABLE **14.**—EMPLOYÉS AND WAGES IN DETAIL—MONTHLY WAGES PAID IN EACH DISTRICT TO ALL GRADES OF EMPLOYÉS ON THE PASSENGER AND FREIGHT CARRYING VESSELS, EXCLUSIVE OF FERRYBOATS.

SUMMARY.

EMPLOYÉS.	ALL CRAFT.			STEAMERS.			SAILING VESSELS.			UNRIGGED CRAFT.		
	Number making ordinary crews.	Aggregate wages for 1 month.	Average monthly wages.	Number making ordinary crews.	Aggregate wages for 1 month.	Average monthly wages.	Number making ordinary crews.	Aggregate wages for 1 month.	Average monthly wages.	Number making ordinary crews.	Aggregate wages for 1 month.	Average monthly wages.
Total	52,659	$1,790,031	$33.99	15,827	$608,320	$38.44	31,957	$967,533	$30.28	4.875	$214,178	$43.93
Captains	8,326	507,108	60.91	810	77,824	96.08	5,229	312,270	59.72	2,287	117,014	51.16
First mates	4,738	179,223	37.83	626	38,725	53.87	3,711	126,095	33.98	401	19,403	48.39
Second mates, third mates, and boatswains.	1,826	59,740	32.72	365	15,255	41.79	1,461	44,485	30.45	....	....	....
Clerks and pursers	570	31,626	55.48	570	31,626	55.48	....	....	....	....	....	....
Surgeons	11	709	64.45	11	709	64.45	....	....	....	....	....	....
First engineers	965	72,229	74.85	810	59,570	73.54	....	....	....	155	12,659	81.67
Second and third engineers	621	35,827	57.69	621	35,827	57.69	....	....	....	....	....	....
Firemen and coal passers	2,258	74,342	32.92	2,240	73,594	32.85	....	....	....	18	748	41.56
Wheelmen and pilots	709	34,307	48.39	674	32,967	48.91	35	1.340	38 29	....	....	....
Lookouts	228	6,670	29.25	209	6,239	29.85	19	431	22.68	....	....	....
Watchmen	532	16,548	31.11	469	14,380	30.66	33	1,054	31.94	30	1,114	37.13
Cooks and bakers	5,505	160,625	29.18	757	26,273	34.71	4,348	121,510	27.95	400	12,842	32.11
Cooks' assistants, pantrymen, and butchers.	737	16,600	22.52	435	10,837	24.91	302	5,763	19.08	....	....	....
Seamen	17,418	372,396	21.38	1,019	27,489	26.98	16,399	344,907	21.03	....	....	....
Deck hands and porters	4,677	132,521	28.33	3,093	82,123	26.55	....	....	....	1,584	50,398	31.82
Oilers and water tenders	521	20,199	38.77	521	20,199	38.77	....	....	....	....	....	....
Stewards and storekeepers	430	19,651	45.70	339	16,163	47.68	91	3,488	38.33	....	....	....
Waiters	1,614	31,864	19.74	1,614	31,864	19.74	....	....	....	....	....	....
Boys	447	6,067	13.57	233	3,699	15.88	214	2,368	11.07	....	....	....
Chambermaids and stewardesses.	381	6,494	17.04	381	6,494	17.04	....	....	....	....	....	....
Carpenters	145	5,285	36.45	30	1,463	48.77	115	3,822	33.23	....	....	....

EARNINGS AND EXPENSES—Continued.

TABLE 14.—EMPLOYÉS AND WAGES IN DETAIL—Continued.

ALL CRAFT.

DISTRICTS.	Number of vessels.	TOTAL.		CAPTAINS.		FIRST MATES.		SECOND MATES, THIRD MATES, AND BOATSWAINS.		CLERKS AND PURSERS.		SURGEONS.	
		Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	9, 464	52, 659	$1. 790, 031	8, 326	$507, 108	4, 738	$179, 223	1, 826	$59, 740	570	$31, 626	11	$709
Steamers	810	15, 827	608, 320	810	77, 824	626	33, 725	365	15, 255	570	31. 626	11	709
Sailing vessels	5, 229	31, 957	967, 533	5, 229	312, 270	3, 711	126, 095	1, 461	44, 485	......	......	......	......
Unrigged craft	3, 425	4, 875	214, 178	2, 287	117, 014	401	19, 403	......	......	......	......	......	......

STEAMERS.

DISTRICTS.	Number of vessels.	TOTAL.		CAPTAINS.		FIRST MATES.		SECOND MATES, THIRD MATES, AND BOATSWAINS.		CLERKS AND PURSERS.		SURGEONS.	
		Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	810	15, 827	608, 320	810	77, 824	626	33, 725	365	15, 255	570	31, 626	11	709
1. Portland	56	841	35, 185	56	4, 889	40	1, 869	15	645	30	1, 770	......	......
2. Boston	82	2, 672	105, 018	82	9, 676	80	4. 880	62	2, 790	80	5, 268	......	......
3. New York	285	5, 563	228, 409	285	31, 411	228	12. 862	101	4, 478	240	12, 338	8	520
4. Philadelphia	112	2, 142	75, 057	112	9. 028	86	4, 311	74	2, 728	45	2. 344	3	189
5. Baltimore	84	1, 696	56, 289	84	6, 762	70	3, 641	48	1, 992	49	2, 432	......	......
6. Norfolk	55	488	13, 461	55	2, 989	36	1, 200	6	210	13	383	......	......
7. Savannah	66	900	33, 501	66	6, 018	36	1, 780	32	1, 087	25	2, 035	......	......
8. Mobile	44	945	34, 784	44	3. 672	29	1, 747	11	495	61	3, 179	......	......
9. New Orleans	18	500	23, 664	18	2, 735	17	1, 290	16	830	21	1, 612	......	......
10. Galveston	8	80	2, 952	8	644	4	145	......	......	6	265	......	......

SAILING VESSELS.

DISTRICTS.	Number of vessels.	TOTAL.		CAPTAINS.		FIRST MATES.		SECOND MATES, THIRD MATES, AND BOATSWAINS.		CLERKS AND PURSERS.		SURGEONS.	
		Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	5, 229	31. 957	967, 533	5, 229	312, 270	3, 711	126, 095	1, 461	44, 485	......	......	......	......
1. Portland	1, 523	12, 550	373, 648	1, 523	99, 421	1, 337	47, 280	690	21, 424	......	......	......	......
2. Boston	655	5. 025	162, 004	655	49, 470	510	19, 910	293	8, 969	......	......	......	......
3. New York	1, 213	6, 943	228, 587	1, 213	81, 878	976	33, 079	335	10, 056	......	......	......	......
4. Philadelphia	563	3, 108	99, 995	563	35, 925	444	15, 662	98	2, 805	......	......	......	......
5. Baltimore	456	1, 908	42, 590	456	17, 173	294	6, 507	31	873	......	......	......	......
6. Norfolk	187	536	10. 853	187	5, 348	66	1, 333	2	70	......	......	......	......
7. Savannah	185	569	13, 173	185	6, 222	30	825	5	110	......	......	......	......
8. Mobile	156	500	14, 036	156	6, 296	29	804	3	78	......	......	......	......
9. New Orleans	168	538	14, 571	168	6, 169	15	450	4	100	......	......	......	......
10. Galveston	123	280	8, 076	123	4, 368	10	245	......	......	......	......	......	......

UNRIGGED CRAFT.

DISTRICTS.	Number of vessels.	TOTAL.		CAPTAINS.		FIRST MATES.		SECOND MATES, THIRD MATES, AND BOATSWAINS.		CLERKS AND PURSERS.		SURGEONS.	
		Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	3, 425	4, 875	214, 178	2, 287	117. 014	401	19, 403	......	......	......	......	......	......
1. Portland	155	183	6. 140	69	2, 955	......	......	......	......	......	......	......	......
2. Boston	214	235	7, 981	97	4, 808	7	200	......	......	......	......	......	......
3. New York	1, 812	3, 438	162, 709	1, 699	90, 447	354	17, 718	......	......	......	......	......	......
4. Philadelphia	496	413	15, 607	117	5. 859	31	1, 125	......	......	......	......	......	......
5. Baltimore	100	215	7, 975	97	4, 112	6	250	......	......	......	......	......	......
6. Norfolk	121	147	4, 056	56	2, 235	......	......	......	......	......	......	......	......
7. Savannah	292	131	5, 142	43	2, 210	3	110	......	......	......	......	......	......
8. Mobile	111	72	2, 848	68	2, 668	......	......	......	......	......	......	......	......
9. New Orleans	13	3	120	3	120	......	......	......	......	......	......	......	......
10. Galveston	51	38	1, 600	38	1, 600	......	......	......	......	......	......	......	......

EARNINGS AND EXPENSES—Continued.

TABLE 14.—EMPLOYÉS AND WAGES IN DETAIL—Continued.

ALL CRAFT—Continued.

DISTRICTS.	FIRST ENGINEERS.		SECOND ENGINEERS AND THIRD ENGINEERS.		FIREMEN AND COAL PASSERS.		WHEELMEN AND PILOTS.		LOOKOUTS.		WATCHMEN.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	965	$72, 229	621	$35, 827	2, 258	$74, 342	709	$34, 307	228	$6, 670	532	$16, 548
Steamers	810	59, 570	621	35, 827	2, 240	73, 594	674	32, 967	209	6, 239	469	14, 380
Sailing vessels							35	1, 340	19	431	33	1, 054
Unrigged craft	155	12, 659			18	748					30	1, 114

STEAMERS—Continued.

DISTRICTS.	FIRST ENGINEERS.		SECOND ENGINEERS AND THIRD ENGINEERS.		FIREMEN AND COAL PASSERS.		WHEELMEN AND PILOTS.		LOOKOUTS.		WATCHMEN.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	810	59, 570	621	35, 827	2, 240	73, 594	674	32, 967	209	6, 239	469	14, 380
1. Portland	56	4, 480	29	2, 030	80	2. 800	45	2, 250	8	272	21	685
2. Boston	82	6, 642	80	4, 610	388	14, 550	120	6, 240	51	1, 676	53	1, 937
3. New York	285	21, 586	241	14, 724	838	27, 654	224	11, 832	94	2, 922	173	5, 892
4. Philadelphia	112	7, 925	90	4, 529	393	11, 794	63	3, 056	2	90	60	1, 803
5. Baltimore	84	6, 336	62	3, 663	274	8, 963	72	2, 080	33	731	65	1, 384
6. Norfolk	55	2, 646	20	653	53	1, 168	23	553	4	83	5	112
7. Savannah	66	4, 381	46	2, 410	103	3, 200	50	1, 710	5	80	30	602
8. Mobile	44	3, 338	25	1, 498	43	1, 224	47	3, 578	6	195	38	1, 210
9. New Orleans	18	1, 720	25	1. 570	67	2, 221	28	1, 598	6	190	18	600
10. Galveston	[illegible]	516	8	110	1	20	2	70			6	155

SAILING VESSELS—Continued.

DISTRICTS.	FIRST ENGINEERS.		SECOND ENGINEERS AND THIRD ENGINEERS.		FIREMEN AND COAL PASSERS.		WHEELMEN AND PILOTS.		LOOKOUTS.		WATCHMEN.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total							35	1, 340	19	431	33	1, 054
1. Portland							10	305	3	70	10	380
2. Boston									2	55	5	183
3. New York							14	315	6	135	9	310
4. Philadelphia												
5. Baltimore							4	210	1	15	2	24
6. Norfolk							1	15				
7. Savannah							6	495	2	36	3	61
8. Mobile												
9. New Orleans												
10. Galveston									5	120	4	96

UNRIGGED CRAFT—Continued.

DISTRICTS.	FIRST ENGINEERS.		SECOND ENGINEERS AND THIRD ENGINEERS.		FIREMEN AND COAL PASSERS.		WHEELMEN AND PILOTS.		LOOKOUTS.		WATCHMEN.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	155	12, 659			18	748					30	1, 114
1. Portland												
2. Boston	7	485										
3. New York	138	11, 449			18	748					25	974
4. Philadelphia	4	245									2	50
5. Baltimore	3	130									3	90
6. Norfolk												
7. Savannah	3	350										
8. Mobile												
9. New Orleans												
10. Galveston												

EARNINGS AND EXPENSES—Continued.

TABLE 14.—EMPLOYÉS AND WAGES IN DETAIL—Continued.

ALL CRAFT—Continued.

DISTRICTS.	COOKS AND BAKERS.		COOKS' ASSISTANTS, PANTRYMEN, AND BUTCHERS.		SEAMEN.		DECK HANDS AND PORTERS.		OILERS AND WATER TENDERS.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	5,505	$160,625	737	$16,600	17,418	$372,396	4,677	$132,521	521	$20,199
Steamers	757	26,273	435	10,837	1,019	27,489	3,093	82,123	521	20,199
Sailing vessels	4,348	121,510	302	5,763	16,399	344,907	....	....	....	....
Unrigged craft	400	12,842	....	....	....	....	1,584	50,398	....	....

STEAMERS—Continued.

DISTRICTS.	Cooks and bakers: Number.	Wages per month.	Cooks' assistants, etc.: Number.	Wages per month.	Seamen: Number.	Wages per month.	Deck hands and porters: Number.	Wages per month.	Oilers and water tenders: Number.	Wages per month.
Total	757	26,273	435	10,837	1,019	27,489	3,093	82,123	521	20,199
1. Portland	50	2,000	20	570	30	780	130	4,160	20	720
2. Boston	102	4,590	78	1,882	193	5,575	543	16,833	110	4,433
3. New York	268	10,038	180	5,182	452	11,603	869	24,766	237	9,670
4. Philadelphia	100	3,016	54	1,328	155	3,596	456	11,838	31	1,160
5. Baltimore	66	1,935	36	673	93	2,297	334	6,379	40	1,490
6. Norfolk	47	835	3	40	7	108	130	2,051	4	100
7. Savannah	54	1,525	24	585	7	150	178	3,350	34	1,365
8. Mobile	42	1,270	26	339	11	360	371	10,062	20	366
9. New Orleans	23	909	13	228	70	2,998	54	2,045	23	830
10. Galveston	5	155	1	10	1	22	28	639	2	65

SAILING VESSELS—Continued.

DISTRICTS.	Cooks and bakers: Number.	Wages per month.	Cooks' assistants, etc.: Number.	Wages per month.	Seamen: Number.	Wages per month.	Deck hands and porters: Number.	Wages per month.	Oilers and water tenders: Number.	Wages per month.
Total	4,348	121,510	302	5,763	16,399	344,907	....	....	....	....
1. Portland	1,419	42,811	156	3,273	7,157	153,732	....	....	....	....
2. Boston	614	20,827	49	1,141	2,811	59,312	....	....	....	....
3. New York	1,046	30,124	69	869	3,203	69,473	....	....	....	....
4. Philadelphia	497	14,249	8	202	1,496	31,087	....	....	....	....
5. Baltimore	399	6,348	12	185	704	11,200	....	....	....	....
6. Norfolk	154	1,996	3	30	119	2,021	....	....	....	....
7. Savannah	56	1,191	....	....	282	4,233	....	....	....	....
8. Mobile	55	1,390	4	48	250	5,363	....	....	....	....
9. New Orleans	85	1,871	1	15	262	5,942	....	....	....	....
10. Galveston	23	703	....	....	115	2,544	....	....	....	....

UNRIGGED CRAFT—Continued.

DISTRICTS.	Cooks and bakers: Number.	Wages per month.	Cooks' assistants, etc.: Number.	Wages per month.	Seamen: Number.	Wages per month.	Deck hands and porters: Number.	Wages per month.	Oilers and water tenders: Number.	Wages per month.
Total	400	12,842	....	....	....	....	1,584	50,398	....	....
1. Portland	45	1,125	....	....	....	....	69	2,060	....	....
2. Boston	42	810	....	....	....	....	82	1,678	....	....
3. New York	234	7,251	....	....	....	....	970	34,122	....	....
4. Philadelphia	72	3,449	....	....	....	....	187	4,879	....	....
5. Baltimore	3	105	....	....	....	....	103	3,288	....	....
6. Norfolk	....	....	....	....	....	....	91	1,821	....	....
7. Savannah	4	102	....	....	....	....	78	2,370	....	....
8. Mobile	....	....	....	....	....	....	4	180	....	....
9. New Orleans	....	....	....	....	....	....	....	....	....	....
10. Galveston	....	....	....	....	....	....	....	....	....	....

EARNINGS AND EXPENSES—Continued.

TABLE 14.—EMPLOYÉS AND WAGES IN DETAIL—Continued.

ALL CRAFT—Continued.

DISTRICTS.	STEWARDS AND STOREKEEPERS.		WAITERS.		BOYS.		CHAMBERMAIDS AND STEWARDESSES.		CARPENTERS.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	430	$19, 651	1, 614	$31, 864	447	$6, 067	381	$6, 494	145	$5, 285
Steamers	339	16, 163	1, 614	31, 864	233	3, 699	381	6. 494	30	1. 463
Sailing vessels	91	3, 488			214	2, 368			115	3, 822
Unrigged craft										

STEAMERS—Continued.

DISTRICTS.	STEWARDS AND STOREKEEPERS.		WAITERS.		BOYS.		CHAMBERMAIDS AND STEWARDESSES.		CARPENTERS.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	339	16, 163	1, 614	31, 864	233	3, 699	381	6, 494	30	1, 463
1. Portland	18	1, 002	137	3, 062	34	775	22	426		
2. Boston	50	2, 795	443	9, 068	15	320	60	1, 223		
3. New York	118	6. 189	498	10, 560	59	986	153	2, 686	12	510
4. Philadelphia	38	1, 761	201	3, 564	29	295	35	577	3	125
5. Baltimore	52	1, 811	172	2, 871	11	153	51	696		
6. Norfolk	4	85	4	48	3	28	16	160		
7. Savannah	26	1, 115	83	1, 507	19	344	16	257		
8. Mobile	16	610	41	580	47	532	20	329	3	200
9. New Orleans	16	745	34	594	15	256	7	115	11	578
10. Galveston	1	50	1	10	1	10	1	16	1	50

SAILING VESSELS—Continued.

DISTRICTS.	STEWARDS AND STOREKEEPERS.		WAITERS.		BOYS.		CHAMBERMAIDS AND STEWARDESSES.		CARPENTERS.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	91	3, 488			214	2, 368			115	3, 822
1. Portland	48	1, 883			160	1, 805			37	1, 264
2. Boston	24	875			31	344			31	918
3. New York	17	655			10	108			45	1, 585
4. Philadelphia	1	30							1	35
5. Baltimore					4	35			1	20
6. Norfolk					4	40				
7. Savannah										
8. Mobile	1	45			2	12				
9. New Orleans					3	24				
10. Galveston										

UNRIGGED CRAFT—Continued.

DISTRICTS.	STEWARDS AND STOREKEEPERS.		WAITERS.		BOYS.		CHAMBERMAIDS AND STEWARDESSES.		CARPENTERS.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total										
1. Portland										
2. Boston										
3. New York										
4. Philadelphia										
5. Baltimore										
6. Norfolk										
7. Savannah										
8. Mobile										
9. New Orleans										
10. Galveston										

GENERAL OPERATIONS BY CLASSES.

TABLE 15.—PASSENGER AND FREIGHT VESSELS—NUMBER, TONNAGE, VALUATION, TRAFFIC OPERATIONS, FINANCIAL ACCOUNT, AND DETAILS OF CREWS AND WAGES OF THE PASSENGER AND FREIGHT CARRYING VESSELS, EXCLUSIVE OF FERRYBOATS, OF THE ATLANTIC COAST AND GULF OF MEXICO

DISTRICTS.	Number.	Tonnage.	Valuation.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total wages paid during year.
ALL CRAFT.														
All districts	9,464	2,371,784	$83,604,347	384,888	73,126,338	80,695,665	11,581,446	$70,843,633	$54,080,214	$16,763,419	17,418	$21.38	52,659	$16,333,338
STEAMERS.														
Total	810	487,939	36,980,280	157,189	22,897,838	28,791,438	11,581,446	30,112,259	23,075,441	7,036,818	1,019	26.98	15,827	5,868,525
1. Portland	56	20,478	1,674,350	16,896	1,101,263	1,177,599	968,604	1,394,214	1,125,757	268,457	30	26.00	841	298,720
2. Boston	82	86,429	6,502,620	20,561	3,419,580	3,885,454	2,119,296	6,157,986	4,892,136	1,265,850	193	28.89	2,672	1,058,953
3. New York	285	215,090	17,096,460	25,652	7,774,204	13,301,662	5,832,914	11,638,286	8,731,193	2,907,093	452	25.67	5,563	2,341,329
4. Philadelphia	112	61,099	4,902,200	4,648	1,624,064	1,729,539	1,448,986	2,979,166	2,109,551	869,615	155	23.20	2,142	758,926
5. Baltimore	84	57,562	3,783,750	28,170	2,255,198	2,292,355	854,464	3,239,950	2,436,819	803,131	93	24.70	1,696	514,868
6. Norfolk	55	6,809	485,000	16,980	1,865,205	2,290,751	89,066	270,550	197,801	72,749	7	15.43	488	131,477
7. Savannah	66	26,781	1,805,700	25,533	2,991,370	2,681,398	152,228	2,029,111	1,760,323	268,788	7	21.43	900	323,249
8. Mobile	44	6,573	367,400	12,166	737,860	375,789	90,956	647,882	542,069	105,813	11	32.73	945	240,997
9. New Orleans	18	6,402	317,300	3,438	324,204	568,259	18,944	1,685,854	1,231,311	454,543	70	42.83	500	172,796
10. Galveston	8	716	54,500	3,145	804,890	488,632	5,988	69,260	48,481	20,779	1	22.00	80	27,210
SAILING VESSELS.														
Total	5,229	1,260,362	38,777,627	227,699	50,228,500	39,801,533	....	31,700,178	23,420,855	8,279,323	16,399	21.03	31,957	8,419,657
1. Portland	1,523	430,981	12,919,607	29,842	6,469,960	4,731,379	....	9,846,292	7,297,317	2,548,975	7,157	21.48	12,550	2,567,183
2. Boston	655	285,700	3,273,500	25,614	7,529,580	7,260,053	....	7,023,668	5,230,381	1,793,287	2,811	21.10	5,025	1,698,494
3. New York	1,213	343,868	10,672,110	70,986	17,568,670	12,833,857	....	8,479,623	6,343,796	2,135,827	3,203	21.69	6,943	2,375,328
4. Philadelphia	563	138,404	4,576,940	15,486	4,395,490	4,927,123	....	4,359,155	3,027,063	1,332,092	1,496	20.78	3,108	932,157
5. Baltimore	456	37,361	1,317,620	22,036	3,986,470	3,450,372	....	957,379	708,901	248,478	704	15.91	1,908	351,879
6. Norfolk	187	6,802	253,980	10,920	2,547,200	2,704,717	....	160,184	119,436	40,748	119	16.98	536	89,240
7. Savannah	185	6,164	244,180	23,636	4,379,720	2,433,097	....	192,266	154,209	38,057	282	15.01	569	97,140
8. Mobile	156	5,674	245,160	10,426	1,500,970	651,176	....	275,387	213,632	61,755	250	21.45	500	119,456
9. New Orleans	168	3,557	159,420	10,864	1,009,230	595,967	....	254,655	206,420	48,235	262	22.68	538	129,220
10. Galveston	123	1,851	115,110	7,889	841,210	213,792	....	151,569	119,700	31,869	115	22.12	280	59,560
UNRIGGED CRAFT.														
Total	3,425	623,483	7,837,440	....	....	12,102,694	....	9,031,196	7,583,918	1,447,278	....	....	4,875	2,045,156
1. Portland	155	16,689	197,795	....	....	216,459	....	424,500	352,160	72,340	....	....	183	50,160
2. Boston	214	35,696	485,675	....	....	1,208,026	....	568,183	460,309	107,874	....	....	235	67,483
3. New York	1,812	360,109	5,233,670	....	....	9,408,113	....	6,879,966	5,861,843	1,018,123	....	....	3,438	1,607,706
4. Philadelphia	496	144,121	1,421,250	....	....	238,247	....	712,812	567,386	145,426	....	....	413	123,572
5. Baltimore	160	26,152	225,650	....	....	81,014	....	182,633	133,563	49,070	....	....	215	77,717
6. Norfolk	121	8,520	43,665	....	....	134,222	....	65,900	54,564	11,336	....	....	147	33,238
7. Savannah	292	17,474	128,025	....	....	726,653	....	102,958	82,759	20,199	....	....	131	46,006
8. Mobile	111	7,763	43,310	....	....	49,980	....	75,444	56,654	18,790	....	....	72	29,152
9. New Orleans	13	650	3,000	....	....	19,980	....	2,800	2,000	800	....	....	3	1,440
10. Galveston	51	6,309	55,400	....	....	20,000	....	16,000	12,680	3,320	....	....	38	8,682

TABLE 16.—FERRYBOATS—NUMBER, TONNAGE, VALUATION, TRAFFIC OPERATIONS, AND DETAILS OF CREWS AND WAGES OF FERRYBOATS.

DISTRICTS.	Number.	Tonnage.	Valuation.	Trips.	Miles.	Passengers carried.	Gross earnings.	Expenses.	Net earnings.	Number making ordinary crews.	Total wages paid during year.
Total	214	98,174	$7,907,700	2,777,382	3,166,152	158,644,012	$5,392,969	$4,568,238	$824,731	1,710	$1,276,847
1. Portland	9	735	102,500	65,100	54,937	523,769	32,818	30,775	2,043	51	16,951
2. Boston	15	5,367	365,280	255,185	176,650	15,496,032	347,255	299,708	47,547	90	57,817
3. New York	142	78,407	6,363,420	1,940,505	2,412,096	124,170,333	4,214,188	3,608,478	605,710	1,258	1,006,510
4. Philadelphia	26	9,491	828,500	315,354	309,406	15,011,582	586,835	462,373	124,462	183	137,652
5. Baltimore	9	1,791	86,500	85,872	95,232	1,620,926	99,844	68,112	31,732	42	19,138
6. Norfolk	[illegible]	1,268	88,000	82,200	23,975	1,471,100	53,100	50,073	3,027	33	11,205
7. Savannah	[illegible]	1,037	61,500	28,410	83,880	295,437	53,054	45,002	8,052	50	25,234
9. New Orleans	1	78	12,000	4,756	9,976	54,833	5,875	3,717	2,158	3	2,340

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 17.—TOWING BOATS—NUMBER, TONNAGE, VALUATION, FINANCIAL ACCOUNT, AND DETAILS OF CREWS AND WAGES OF TOWING BOATS.

DISTRICTS.	Number.	Tonnage.	Valuation.	Gross earnings.	Expenses.	Net earnings.	Number making ordinary crews.	Total wages paid during year.
Total	1, 095	61, 359	$10, 203, 330	$10, 131, 921	$8, 526, 733	$1, 605, 188	6, 152	$3, 042, 066
1. Portland	49	2, 782	395, 900	355, 023	279, 864	75, 159	276	114, 059
2. Boston	83	4, 412	702, 580	772, 233	668, 349	103, 884	458	213, 583
3. New York	536	35, 122	5, 886, 500	5, 835, 780	5, 017, 893	817, 887	3, 174	1, 656, 862
4. Philadelphia	124	5, 857	1, 123, 000	1, 135, 885	879, 865	256, 020	634	308, 113
5. Baltimore	103	4, 038	698, 900	646, 001	546, 762	99, 239	515	255, 920
6. Norfolk	58	2, 114	317, 600	333, 795	259, 527	74, 268	298	111, 098
7. Savannah	64	3, 332	526, 350	450, 412	383, 283	67, 129	334	162, 328
8. Mobile	53	2, 741	415, 000	331, 833	291, 157	40, 676	301	151, 545
9. New Orleans	14	500	61, 500	80, 540	65, 830	14, 710	94	36, 967
10. Galveston	11	461	76, 000	190, 419	134, 203	56, 216	68	31, 591

TABLE 18.—YACHTS—NUMBER, TONNAGE, AND VALUATION OF YACHTS AND PLEASURE BOATS.

STEAMERS AND SAILING VESSELS.

DISTRICTS.	Number.	Tonnage.	Valuation.
All districts	798	25, 756	$6, 202, 065

STEAMERS.

Total	170	11, 328	3, 520, 610
1. Portland	2	43	11, 500
2. Boston	36	1, 856	469, 300
3. New York	100	8, 215	2, 723, 610
4. Philadelphia	13	529	165, 700
5. Baltimore	4	331	87, 000
6. Norfolk	1	42	5, 000
7. Savannah	7	154	41, 500
8. Mobile	4	83	8, 800
9. New Orleans	....	....	....
10. Galveston	3	75	8, 200

SAILING VESSELS.

Total	628	14, 428	2, 681, 455
1. Portland	31	418	35, 690
2. Boston	175	4, 122	740, 405
3. New York	319	8, 357	1, 764, 085
4. Philadelphia	56	926	102, 040
5. Baltimore	9	124	9, 820
6. Norfolk	2	25	1, 250
7. Savannah	9	118	6, 500
8. Mobile	10	94	8, 350
9. New Orleans	3	39	2, 250
10. Galveston	14	205	11, 065

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 19.—HARBOR CRAFT—NUMBER, TONNAGE, VALUATION, FINANCIAL ACCOUNT, AND DETAILS OF CREWS AND WAGES OF HARBOR CRAFT.

STEAMERS AND SAILING VESSELS.

DISTRICTS.	Number.	Tonnage.	Valuation.	Gross earnings.	Expenses.	Net earnings.	Number making ordinary crews.	Total wages paid during year.
All districts	462	29, 692	$2, 597, 690	$2, 225, 751	$1, 729, 458	$496, 293	1, 784	$765, 788

STEAMERS.

DISTRICTS.	Number.	Tonnage.	Valuation.	Gross earnings.	Expenses.	Net earnings.	Number making ordinary crews.	Total wages paid during year.
Total	94	13, 843	1, 446, 150	812, 513	676, 228	136, 285	644	346, 671
1. Portland	2	324	75, 000	38, 000	30, 500	7, 500	21	12, 240
2. Boston	11	951	102, 250	56, 283	49, 637	6, 646	40	20, 856
3. New York	61	8, 844	860, 900	526, 144	432, 404	93, 740	382	231, 461
4. Philadelphia	2	470	53, 500	35, 478	34, 893	585	24	12, 399
5. Baltimore	3	1, 728	187, 000	41, 000	35, 599	5, 401	60	25, 834
6. Norfolk	4	169	17, 500	21, 268	18, 750	2, 518	24	10, 020
7. Savannah	4	171	30, 000	21, 480	15, 843	5, 637	43	12, 590
8. Mobile	......	......	......	......	......	......	......	......
9. New Orleans	2	249	40, 000	8, 460	6, 500	1, 960	18	4, 590
10. Galveston	5	937	80, 000	64, 400	52, 102	12, 298	32	16, 681

SAILING VESSELS.

DISTRICTS.	Number.	Tonnage.	Valuation.	Gross earnings.	Expenses.	Net earnings.	Number making ordinary crews.	Total wages paid during year.
Total	368	15, 849	1, 151, 540	1, 413, 238	1, 053, 230	360, 008	1, 140	419, 117
1. Portland	11	214	5, 410	12, 520	9, 310	3, 210	23	3, 720
2. Boston	32	1, 474	153, 150	86, 152	63, 630	22, 522	98	21, 210
3. New York	226	11, 038	672, 850	1, 095, 614	810, 820	284, 794	664	299, 282
4. Philadelphia	8	466	84, 000	31, 697	22, 140	9, 557	37	7, 400
5. Baltimore	4	218	11, 700	13, 306	10, 125	3, 181	18	5, 020
6. Norfolk	9	451	47, 700	24, 111	17, 250	6, 861	42	12, 940
7. Savannah	42	1, 238	124, 720	92, 018	74, 585	17, 433	164	44, 780
8. Mobile	25	559	39, 250	42, 834	33, 420	9, 414	66	18, 325
9. New Orleans	5	54	2, 860	5, 930	4, 795	1, 135	9	2, 860
10. Galveston	6	137	9, 900	9, 056	7, 155	1, 901	19	3, 580

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 20.—MISCELLANEOUS CRAFT—NUMBER, TONNAGE, VALUATION, FINANCIAL ACCOUNT, AND DETAILS OF CREWS AND WAGES OF MISCELLANEOUS CRAFT.

STEAMERS AND SAILING VESSELS.

DISTRICTS.	Number.	Tonnage.	Valuation.	Gross earnings.	Expenses.	Net earnings.	Number making ordinary crews.	Total wages paid during year.
All districts	205	71, 680	$5, 526, 930	$1, 553, 358	$1, 322, 149	$231, 209	1, 320	$705, 060

STEAMERS.

DISTRICTS.	Number.	Tonnage.	Valuation.	Gross earnings.	Expenses.	Net earnings.	Number making ordinary crews.	Total wages paid during year.
Total	153	69, 127	5, 451, 570	1, 553, 358	1, 322, 149	231, 209	1, 320	705, 060
1. Portland	1	408	15, 000	5, 352	4, 600	752	4	2, 790
2. Boston	4	1, 334	124, 000	27, 250	23, 200	4, 050	37	18, 590
3. New York	98	40, 740	3, 603, 170	751, 183	622, 379	128, 804	618	373, 433
4. Philadelphia	16	2, 872	366, 800	210, 986	179, 647	31, 339	132	69, 937
5. Baltimore	5	1, 713	156, 500	47, 513	40, 429	7, 084	24	17, 520
6. Norfolk	10	1, 389	68, 000	54, 949	46, 760	8, 189	52	22, 460
7. Savannah	4	104	18, 600	8, 577	7, 246	1, 331	15	4, 304
8. Mobile	....	....	....	....	....	....	....	....
9. New Orleans	14	20, 519	1, 082, 000	443, 385	394, 338	49, 047	432	194, 146
10. Galveston	1	48	17, 500	4, 163	3, 550	613	6	1, 880

SAILING VESSELS. (*a*)

DISTRICTS.	Number.	Tonnage.	Valuation.	Gross earnings.	Expenses.	Net earnings.	Number making ordinary crews.	Total wages paid during year.
Total	52	2, 553	75, 360	....	....	....	....	....
1. Portland	3	47	850	....	....	....	....	....
2. Boston	1	46	1, 500	....	....	....	....	....
3. New York	28	1, 186	45, 480	....	....	....	....	....
4. Philadelphia	10	1, 135	20, 800	....	....	....	....	....
5. Baltimore	1	19	1, 500	....	....	....	....	....
6. Norfolk	1	8	130	....	....	....	....	....
7. Savannah	5	59	2, 500	....	....	....	....	....
8. Mobile	....	....	....	....	....	....	....	....
9. New Orleans	2	15	1, 100	....	....	....	....	....
10. Galveston	1	38	1, 500	....	....	....	....	....

a Number, tonnage, and valuation only reported.

TABLE 21.—NO TRAFFIC REPORT—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS AND SAILING VESSELS FOR WHICH NO TRAFFIC REPORT WAS RECEIVED.

STEAMERS AND SAILING VESSELS.

DISTRICTS.	Number.	Tonnage.	Valuation.
All districts	1, 228	204, 185	$11, 634, 425

STEAMERS.

DISTRICTS.	Number.	Tonnage.	Valuation.
Total	397	95, 392	8, 035, 900
1. Portland	16	2, 148	236, 900
2. Boston	44	7, 941	767, 100
3. New York	154	56, 453	4, 439, 000
4. Philadelphia	62	10, 747	1, 152, 550
5. Baltimore	21	4. 593	355, 400
6. Norfolk	23	1, 759	188, 500
7. Savannah	35	5, 542	475, 200
8. Mobile	25	2, 016	176, 550
9. New Orleans	7	3, 659	199, 900
10. Galveston	10	534	44. 800

SAILING VESSELS.

DISTRICTS.	Number.	Tonnage.	Valuation.
Total	831	108, 793	3, 598, 525
1. Portland	110	28, 929	916, 865
2. Boston	114	23, 478	778, 670
3. New York	231	38, 255	1, 177, 280
4. Philadelphia	68	6, 718	254, 420
5. Baltimore	63	2, 813	125, 420
6. Norfolk	87	2, 721	110, 700
7. Savannah	58	853	43, 025
8. Mobile	52	3, 344	136, 400
9. New Orleans	36	582	28, 730
10. Galveston	12	1, 100	27, 015

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 22.—SUMMARY—NUMBER, TONNAGE, VALUATION, TRAFFIC OPERATIONS, FINANCIAL ACCOUNT, AND DETAILS OF CREWS AND WAGES OF ALL VESSELS OF EVERY CLASS OF OCCUPATION OF 5 TONS BURDEN AND OVER, BY DISTRICTS.

ALL CRAFT.

DISTRICTS.	Number.	Tonnage.	Valuation.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
All districts	13, 466	2, 862, 630	$127, 676, 487	3, 162, 270	76, 292, 490	80, 695, 665	170, 225, 458

ALL CRAFT—Continued.

DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total wages paid during year.
All districts	$90, 147, 632	$70, 226, 792	$19, 920, 840	17, 418	$21. 38	63, 625	$22, 123, 099

STEAMERS.

DISTRICTS.	Number.	Tonnage.	Valuation.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
Total	2, 933	837, 162	$73, 554, 540	2, 934, 571	26, 063, 990	28, 791, 438	170, 225, 458
1. Portland	135	26, 918	2, 511, 150	81, 996	1, 156, 200	1, 177, 599	1, 492, 373
Passenger and freight	56	20, 478	1, 674, 350	16, 896	1, 101, 263	1, 177, 599	968, 604
Towing	49	2, 782	395, 900				
Ferry	9	735	102, 500	65, 100	54, 937		523, 769
Yachts	2	43	11, 500				
Harbor	2	324	75, 000				
Miscellaneous	1	408	15, 000				
No traffic report	16	2, 148	236, 900				
2. Boston	275	108, 290	9, 033, 130	275, 746	3, 596, 230	3, 885, 454	17, 615, 328
Passenger and freight	82	86, 429	6, 502, 620	20, 561	3, 419, 580	3, 885, 454	2, 119, 296
Towing	83	4, 412	702, 580				
Ferry	15	5, 367	365, 280	255, 185	176, 650		15, 496, 032
Yachts	36	1, 856	469, 300				
Harbor	11	951	102, 250				
Miscellaneous	4	1, 334	124, 000				
No traffic report	44	7, 941	767, 100				
3. New York	1, 376	442, 871	40, 973, 060	1, 966, 157	10, 186, 300	13, 301, 662	130, 003, 247
Passenger and freight	285	215, 090	17, 096, 460	25, 652	7, 774, 204	13, 301, 662	5, 832, 914
Towing	536	35, 122	5, 886, 500				
Ferry	142	78, 407	6, 363, 420	1, 940, 505	2, 412, 096		124, 170, 333
Yachts	100	8, 215	2, 723, 610				
Harbor	61	8. 844	860, 900				
Miscellaneous	98	40, 740	3, 603, 170				
No traffic report	154	56, 453	4, 439, 000				
4. Philadelphia	355	91, 065	8, 592, 250	320, 002	1, 933, 470	1, 729, 539	16, 460, 568
Passenger and freight	112	61, 099	4, 902. 200	4, 648	1, 624, 064	1, 729, 539	1, 448, 986
Towing	124	5, 857	1, 123, 000				
Ferry	26	9, 491	828, 500	315, 354	309, 406		15, 011, 582
Yachts	13	529	165, 700				
Harbor	2	470	53, 500				
Miscellaneous	16	2, 872	366, 800				
No traffic report	62	10, 747	1, 152, 550				
5. Baltimore	229	71, 756	5, 355, 050	114, 042	2, 350, 430	2, 292, 355	2, 475, 390
Passenger and freight	84	57, 562	3, 783, 750	28, 170	2, 255, 198	2, 292, 355	854, 464
Towing	103	4, 038	698, 900				
Ferry	9	1, 791	86, 500	85, 872	95, 232		1, 620, 926
Yachts	4	331	87, 000				
Harbor	3	1, 728	187, 000				
Miscellaneous	5	1, 713	156, 500				
No traffic report	21	4, 593	355, 400				
6. Norfolk	154	13, 550	1, 169, 600	99, 180	1, 889, 180	2, 290, 751	1, 560, 166
Passenger and freight	55	6, 809	485, 000	16, 980	1, 865, 205	2, 290, 751	89, 066
Towing	58	2, 114	317, 600				
Ferry	3	1, 268	88, 000	82, 200	23, 975		1, 471, 100
Yachts	1	42	5, 000				
Harbor	4	169	17, 500				
Miscellaneous	10	1, 389	68, 000				
No traffic report	23	1, 759	188, 500				

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 22.—SUMMARY—Continued.

STEAMERS—Continued.

DISTRICTS.	Number.	Tonnage.	Valuation.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
7. Savannah	189	37, 121	$2, 958, 850	53, 943	3, 075, 250	2, 681, 398	447, 665
Passenger and freight	66	26, 781	1, 805, 700	25, 533	2, 991, 370	2, 681, 398	152, 228
Towing	64	3, 332	526, 350				
Ferry	9	1, 037	61, 500	28, 410	83, 880		295, 437
Yachts	7	154	41, 500				
Harbor	4	171	30, 000				
Miscellaneous	4	104	18, 600				
No traffic report	35	5, 542	475, 200				
8. Mobile	126	11, 413	967, 750	12, 166	737, 860	375, 789	90, 956
Passenger and freight	44	6, 573	367, 400	12, 166	737, 860	375, 789	90, 956
Towing	53	2, 741	415, 000				
Yachts	[illegible]	83	8, 800				
No traffic report	25	2, 016	176, 550				
9. New Orleans	56	31, 407	1, 712, 700	8, 194	334, 180	568, 259	73, 777
Passenger and freight	18	6, 402	317, 300	3, 438	324, 204	568, 259	18, 944
Towing	14	500	61, 500				
Ferry	1	78	12, 000	4, 756	9, 976		54, 833
Harbor	2	249	40, 000				
Miscellaneous	14	20, 519	1, 082, 000				
No traffic report	7	3, 659	199, 900				
10. Galveston	38	2, 771	281, 000	3, 145	804, 890	488, 632	5, 988
Passenger and freight	[illegible]	716	54, 500	3, 145	804, 890	488, 632	5, 988
Towing	11	461	76, 000				
Yachts	3	75	8, 200				
Harbor	5	937	80, 000				
Miscellaneous	1	48	17, 500				
No traffic report	10	534	44, 800				

STEAMERS—Continued.

DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total wages paid during year.
Total	$48, 003, 020	$38, 168, 789	$9, 834, 231	1, 019	$26. 98	25, 653	$11, 239, 169
1. Portland	1, 825, 407	1, 471, 496	353, 911	30	26. 00	1, 193	444, 760
Passenger and freight	1, 394, 214	1, 125, 757	268, 457	30	26. 00	841	298, 720
Towing	355, 023	279, 864	75, 159			276	114, 059
Ferry	32, 818	30, 775	2, 043			51	16, 951
Harbor	38. 000	30, 500	7, 500			21	12, 240
Miscellaneous	5, 352	4, 600	752			4	2, 790
2. Boston	7, 361, 007	5, 933, 030	1, 427, 977	193	28. 89	3, 297	1, 369, 799
Passenger and freight	6, 157, 986	4, 892, 136	1, 265, 850	193	28. 89	2, 672	1, 058, 953
Towing	772, 233	668, 349	103, 884			458	213, 583
Ferry	347, 255	299, 708	47, 547			90	57, 817
Harbor	56, 283	49, 637	6, 646			40	20, 856
Miscellaneous	27, 250	23, 200	4, 050			37	18, 590
3. New York	22, 965, 581	18, 412, 347	4, 553, 234	452	25. 67	10, 995	5, 609, 595
Passenger and freight	11, 638, 286	8, 731, 193	2, 907, 093	452	25. 67	5, 563	2, 341, 329
Towing	5, 835, 780	5, 017, 893	817, 887			3, 174	1, 656, 862
Ferry	4, 214, 188	3, 608, 478	605, 710			1, 258	1, 006, 510
Harbor	526, 144	432, 404	93, 740			382	231, 461
Miscellaneous	751, 183	622, 379	128, 804			618	373, 433
4. Philadelphia	4, 948, 350	3, 666, 329	1, 282, 021	155	23. 20	3, 115	1, 287, 027
Passenger and freight	2, 979, 166	2, 109, 551	869, 615	155	23. 20	2, 142	758, 926
Towing	1, 135, 885	879, 865	256, 020			634	308, 113
Ferry	586, 835	462, 373	124, 462			183	137, 652
Harbor	35, 478	34, 893	585			24	12, 399
Miscellaneous	210, 986	179, 647	31, 339			132	69, 937
5. Baltimore	4, 074, 308	3, 127, 721	946, 587	93	24. 70	2, 337	833, 280
Passenger and freight	3, 239, 950	2, 436, 819	803, 131	93	24. 70	1, 696	514, 868
Towing	646, 001	546, 762	99, 239			515	255, 920
Ferry	99, 844	68, 112	31, 732			42	19, 138
Harbor	41, 000	35, 599	5, 401			60	25, 834
Miscellaneous	47, 513	40, 429	7, 084			24	17, 520

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 22.—SUMMARY—Continued.

STEAMERS—Continued.

DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total wages paid during year.
6. Norfolk	$733, 662	$572, 911	$160, 751	7	$15. 43	895	$286, 260
Passenger and freight	270, 550	197, 801	72, 749	7	15. 43	488	131, 477
Towing	333, 795	259, 527	74, 268			298	111, 098
Ferry	53, 100	50, 073	3, 027			33	11, 205
Harbor	21, 268	18, 750	2, 518			24	10, 020
Miscellaneous	54, 949	46, 760	8, 189			52	22, 460
7. Savannah	2, 562, 634	2, 211, 697	350, 937	7	21. 43	1, 342	527, 705
Passenger and freight	2, 029, 111	1, 760, 323	268, 788	7	21. 43	900	323, 249
Towing	450, 412	383, 283	67, 129			334	162, 328
Ferry	53, 054	45, 002	8, 052			50	25, 234
Harbor	21, 480	15, 843	5, 637			43	12, 590
Miscellaneous	8, 577	7, 246	1, 331			15	4, 304
8. Mobile	979, 715	833, 226	146, 489	11	32. 73	1, 246	392, 542
Passenger and freight	647, 882	542, 069	105, 813	11	32. 73	945	240, 997
Towing	331, 833	291, 157	40, 676			301	151, 545
9. New Orleans	2, 224. 114	1, 701, 696	522, 418	70	42. 83	1, 047	410, 839
Passenger and freight	1, 685, 854	1, 231, 311	454, 543	70	42. 83	500	172, 796
Towing	80, 540	65, 830	14, 710			94	36, 967
Ferry	5, 875	3, 717	2. 158			3	2, 340
Harbor	8, 460	6, 500	1, 960			18	4, 590
Miscellaneous	443, 385	394, 338	49, 047			432	194, 146
10. Galveston	328, 242	238, 336	89, 906	1	22. 00	186	77, 362
Passenger and freight	69, 260	48. 481	20, 779	1	22. 00	80	27, 210
Towing	190, 419	134, 203	56, 216			68	31, 591
Harbor	64, 400	52, 102	12, 298			32	16, 681
Miscellaneous	4, 163	3, 550	613			6	1, 880

SAILING VESSELS.

DISTRICTS.	Number.	Tonnage.	Valuation.	Trips.	Miles.	Freight moved. (Tons.)	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total wages paid during year.
Total	7, 108	1, 401, 985	$46, 284, 507	227, 699	50, 228, 500	39, 801, 533	$33, 113, 416	$24, 474, 085	$8, 639, 331	16, 399	$21. 03	33, 097	$8, 838, 774
1. Portland	1, 678	460, 589	13, 878, 422	29, 842	6, 469, 960	4, 731, 379	9, 858, 812	7, 306, 627	2, 552, 185	7, 157	21. 48	12, 573	2, 570, 903
Freight	1, 523	430, 981	12, 919, 607	29, 842	6, 469, 960	4, 731, 379	9, 846, 292	7, 297, 317	2, 548, 975	7, 157	21. 48	12, 550	2, 567, 183
Harbor	11	214	5, 410				12, 520	9, 310	3, 210			23	3, 720
Yachts	31	418	35. 690										
Miscellaneous (*a*)	3	47	850										
No traffic report	110	28, 929	916, 865										
2. Boston	977	314, 820	9, 947, 225	25, 614	7, 529, 580	7, 260, 053	7, 109, 820	5, 294, 011	1, 815, 809	2, 811	21. 10	5, 123	1, 719, 704
Freight	655	285, 700	8, 273, 500	25, 614	7, 529, 580	7, 260, 053	7, 023, 668	5, 230, 381	1, 793, 287	2, 811	21. 10	5, 025	1, 698, 494
Harbor	32	1, 474	153, 150				86, 152	63, 630	22, 522			98	21, 210
Yachts	175	4, 122	740, 405										
Miscellaneous (*a*)	1	46	1, 500										
No traffic report	114	23, 478	778, 670										
3. New York	2, 017	402, 704	14, 331, 805	70, 986	17, 568, 670	12, 833, 857	9, 575, 237	7, 154, 616	2, 420, 621	3, 203	21. 69	7, 607	2, 674, 610
Freight	1, 213	343, 868	10, 672, 110	70, 986	17, 568, 670	12, 833. 857	8, 479, 623	6, 343, 796	2, 135, 827	3, 203	21. 69	6, 943	2, 375, 328
Harbor	226	11, 038	672, 850				1, 095, 614	810, 820	284, 794			664	299, 282
Yachts	319	8, 357	1, 764, 085										
Miscellaneous (*a*)	28	1, 186	45, 480										
No traffic report	231	38, 255	1, 177, 280										
4. Philadelphia	705	147, 649	5, 038, 200	15, 486	4, 395, 490	4, 927, 123	4, 390, 852	3, 049, 203	1, 341, 649	1, 496	20. 78	3, 145	939, 557
Freight	563	138, 404	4, 576, 940	15, 486	4, 395, 490	4, 927, 123	4, 359, 155	3, 027, 063	1, 332, 092	1, 496	20. 78	3, 108	932, 157
Harbor	8	466	84, 000				31. 697	22, 140	9, 557			37	7, 400
Yachts	56	926	102, 040										
Miscellaneous (*a*)	10	1, 135	20, 800										
No traffic report	68	6, 718	254, 420										

a Number, tonnage, and valuation only reported.

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 22.—SUMMARY—Continued.

SAILING VESSELS—Continued.

DISTRICTS.	Number.	Tonnage.	Valuation.	Trips.	Miles.	Freight moved. (Tons.)	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total wages paid during year.
5. Baltimore	533	40, 535	$1, 466, 060	22, 036	3, 986, 470	3, 450, 372	$970, 685	$719, 026	$251, 659	704	$15. 91	1, 926	$356, 899
Freight	456	37, 361	1, 317, 620	22, 036	3, 986, 470	3, 450, 372	957, 379	708, 901	248, 478	704	15. 91	1, 908	351, 879
Harbor	4	218	11, 700				13, 306	10, 125	3, 181			18	5, 020
Yachts	9	124	9, 820										
Miscellaneous (*a*)	1	19	1, 500										
No traffic report	63	2, 813	125, 420										
6. Norfolk	286	10, 007	413, 760	10, 920	2, 547, 200	2, 704, 717	184, 295	136, 686	47, 609	119	16. 98	578	102, 180
Freight	187	6, 802	253, 980	10, 920	2, 547, 200	2, 704, 717	160, 184	119, 436	40, 748	119	16. 98	536	89, 240
Harbor	9	451	47, 700				24, 111	17, 250	6, 861			42	12, 940
Yachts	2	25	1, 250										
Miscellaneous (*a*)	1	8	130										
No traffic report	87	2, 721	110, 700										
7. Savannah	299	8, 432	420, 925	23, 636	4, 379, 720	2, 433, 097	284, 284	228, 794	55, 490	282	15. 01	733	141, 920
Freight	185	6, 164	244, 180	23, 636	4, 379, 720	2, 433, 097	192, 266	154, 209	38, 057	282	15. 01	569	97, 140
Harbor	42	1, 238	124, 720				92, 018	74, 585	17, 433			164	44, 780
Yachts	9	118	6, 500										
Miscellaneous (*a*)	5	59	2, 500										
No traffic report	58	853	43, 025										
8. Mobile	243	9, 671	429, 160	10, 426	1, 500, 970	651, 176	318, 221	247, 052	71, 169	250	21. 45	566	137, 781
Freight	156	5, 674	245, 160	10, 426	1, 500, 970	651, 176	275, 387	213, 632	61, 755	250	21. 45	500	119, 456
Harbor	25	550	39, 250				42, 834	33, 420	9, 414			66	18, 325
Yachts	10	94	8, 350										
No traffic report	52	3, 344	136, 400										
9. New Orleans	214	4, 247	194, 360	10, 864	1, 009, 230	595, 967	260, 585	211, 215	49, 370	262	22. 68	547	132, 080
Freight	168	3, 557	159, 420	10, 864	1, 009, 230	595, 967	254, 655	206, 420	48, 235	262	22. 68	538	129, 220
Harbor	5	54	2, 860				5, 930	4, 795	1, 135			9	2, 860
Yachts	3	39	2, 250										
Miscellaneous (*a*)	2	15	1, 100										
No traffic report	36	582	28, 730										
10. Galveston	156	3, 331	164, 590	7, 889	841, 210	213, 792	160, 625	126, 855	33, 770	115	22. 12	299	63, 140
Freight	123	1, 851	115, 110	7, 889	841, 210	213, 792	151, 569	119, 700	31, 869	115	22. 12	280	59, 560
Harbor	6	137	9, 900				9, 056	7, 155	1, 901			19	3, 580
Yachts	14	205	11, 065										
Miscellaneous (*a*)	1	38	1, 500										
No traffic report	12	1, 100	27, 015										

UNRIGGED CRAFT.

DISTRICTS.	Number.	Tonnage.	Valuation.	Freight moved. (Tons.)	Gross earnings.	Expenses.	Net earnings.	Number making ordinary crews.	Total wages paid during year.
Total	3, 425	623, 483	$7, 837, 440	12, 102, 694	$9, 031, 196	$7, 583, 918	$1, 447. 278	4, 875	$2,045, 156
1. Portland	155	16. 689	197, 795	216, 459	424, 500	352, 160	72, 340	183	50, 160
2. Boston	214	35, 696	485, 675	1, 208, 026	568. 183	460, 309	107, 874	235	67, 483
3. New York	1, 812	360, 109	5, 233, 670	9, 408, 113	6, 879, 966	5, 861, 843	1, 018, 123	3, 438	1, 607, 706
4. Philadelphia	496	144, 121	1, 421, 250	238, 247	712, 812	567, 386	145, 426	413	123, 572
5. Baltimore	160	26, 152	225, 650	81, 014	182, 633	133, 563	49, 070	215	77, 717
6. Norfolk	121	8, 520	43, 665	134, 222	65, 900	54, 564	11, 336	147	33, 238
7. Savannah	292	17, 474	128, 025	726, 653	102, 958	82, 759	20, 199	131	46, 006
8. Mobile	111	7, 763	43, 310	49, 980	75, 444	56, 654	18, 790	72	29, 152
9. New Orleans	13	650	3, 000	19, 980	2, 800	2, 000	800	3	1, 440
10. Galveston	51	6, 309	55, 400	20, 000	16, 000	12, 680	3, 320	38	8, 682

a Number, tonnage, and valuation only reported.

FUEL ACCOUNT.

TABLE 23.—AMOUNT AND VALUE OF COAL AND WOOD USED ON ALL STEAMERS OF THE ATLANTIC COAST AND GULF OF MEXICO IN 1889.

DISTRICTS.	Total cost of fuel.	COAL.		WOOD.	
		Tons.	Cost.	Cords.	Cost.
Total	$7,751,487	2,298,418	$7,512,650	130,585	$238,837
1. **Portland**	319,983	74,619	319,658	325	325
2. **Boston**	1,080,077	320,385	1,080,077	....	....
3. **New York**	4,077,965	1,239,822	4,063,205	4,838	14,760
4. **Philadelphia**	821,575	301,548	821,125	600	450
5. **Baltimore**	497,030	170,839	497,030	....	....
6. **Norfolk**	133,225	33,291	108,755	16,430	24,470
7. **Savannah**	335,835	65,502	258,196	33,799	77,639
8. **Mobile**	149,912	13,023	50,543	60,051	99,369
9. **New Orleans**	300,031	74,890	287,207	8,997	12,824
10. **Galveston**	35,854	4,499	26,854	5,545	9.000

COMPARATIVE STATISTICS.

TABLE 24.—STEAMERS IN 1880 AND 1889—NUMBER, TONNAGE, AND VALUATION OF STEAMERS IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES.

STATES AND YEARS.	Number.	Tonnage.	Valuation.
Total 1880	2,195	613,986.02	$45,394,700
1889	2,933	837,162.00	73,554,540
Maine 1880	81	16,018.21	1,078,300
1889	127	26,522.00	2,463,750
New Hampshire 1880	7	267.79	30,600
1889	8	396.00	47,400
Massachusetts 1880	162	47,427.43	3,070,000
1889	211	84,670.00	7,226,930
Rhode Island 1880	51	20,046.39	1,393,150
1889	64	23,620.00	1,806,200
Connecticut 1880	90	27,576.99	1,575,600
1889	132	40,391.00	3,233,300
New York 1880	844	276,777.38	20,792,150
1889	1,161	391,172.00	36,495,410
New Jersey 1880	163	41,811.17	2,402,150
1889	151	24,081.00	2,354,700
Pennsylvania 1880	203	54,086.66	4,516,300
1889	249	63,535.00	5,882,400
Delaware 1880	25	5,877.97	302,300
1889	38	14,757.00	1,599,500
Maryland 1880	158	44,837.16	3,870,950
1889	175	62,133.00	4,638,100
District of Columbia 1880	34	6,945.77	$595,000
1889	42	8,939.00	654,000
Virginia 1880	89	6,251.02	494,400
1889	100	8,672.00	786,950
North Carolina 1880	37	3,720.16	185,800
1889	66	5,562.00	445,600
South Carolina 1880	41	5,242.10	242,700
1889	61	7,138.00	618,900
Georgia 1880	44	13,331.46	1,387,300
1889	63	25,262.00	1,857,050
Florida 1880	70	6,826.60	448,500
1889	131	9,386.00	948,100
Alabama 1880	43	7,168.17	257,600
1889	49	4,915.00	394,650
Mississippi 1880	....	....	....
1889	11	1,833.00	107,900
Louisiana 1880	18	25,421.68	2,555,000
1889	56	31,407.00	1,712,700
Texas 1880	35	4,351.91	196,900
1889	38	2,771.00	281,000

COMPARATIVE STATISTICS—Continued.

TABLE 25.—GROSS EARNINGS AND WAGES OF STEAMERS IN 1880 AND 1889—GROSS EARNINGS OF STEAMERS OPERATING IN 1880 AND 1889, AND AMOUNT PAID OUT IN WAGES DURING THOSE YEARS, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES.

STATES AND YEARS.		Gross earnings.	Paid in wages.
Total	1880	$44, 430, 765	$12, 964, 874
	1889	48, 003, 020	11, 239, 169
Maine	1880	882, 158	334, 014
	1889	1, 786, 352	432, 888
New Hampshire	1880	19, 280	6, 500
	1889	39, 055	11, 872
Massachusetts	1880	3, 127, 512	897, 923
	1889	6, 387, 850	1, 039, 708
Rhode Island	1880	1, 293, 396	517, 123
	1889	973, 157	330, 091
Connecticut	1880	2, 017, 650	693, 663
	1889	2, 813, 969	662, 961
New York	1880	22, 231, 956	5, 775, 013
	1889	19, 357, 135	4, 679, 356
New Jersey	1880	2, 611, 048	833, 891
	1889	1, 664, 984	453, 020
Pennsylvania	1880	3, 362, 963	897, 472
	1889	3, 527, 247	963, 913
Delaware	1880	138, 293	54, 179
	1889	550, 596	137, 372
Maryland	1880	3, 071, 740	1, 032, 135
	1889	3, 530, 285	749, 875
District of Columbia	1880	$300, 576	$82, 050
	1889	430, 023	63, 379
Virginia	1880	567, 193	185, 451
	1889	597, 274	207, 667
North Carolina	1880	404, 864	104, 955
	1889	250, 388	98, 619
South Carolina	1880	385, 554	150, 286
	1889	496, 679	159, 111
Georgia	1880	1, 084, 430	320, 727
	1889	1, 532, 375	279, 535
Florida	1880	504, 088	158, 816
	1889	877, 948	280, 085
Alabama	1880	437, 465	251, 220
	1889	491, 279	164, 086
Mississippi	1880	....	....
	1889	144, 068	37, 430
Louisiana	1880	1, 654, 843	506, 405
	1889	2, 224, 114	410, 839
Texas	1880	335, 756	163, 051
	1889	328, 242	77, 362

TABLE 26.—STEAMERS' CREWS AND WAGES IN 1880 AND 1889—NUMBER OF MEN CONSTITUTING ORDINARY CREWS EMPLOYED ON STEAMERS OPERATING IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES, WAGES PAID, AND AVERAGES OF ANNUAL PAY AND INCREASE OR DECREASE PER MAN.

STATES AND YEARS.		Total number of men, ordinary crews.	Total wages paid.	Average annual wages per man.	Increase in annual average wages per man.	Decrease in annual average wages per man.
Total	1880	24, 910	$12, 964, 874	$520. 47	....	....
	1889	25, 653	11, 239, 169	438. 12	....	$82. 35
Maine	1880	688	334, 014	485. 49	....	....
	1889	1, 168	432, 888	370. 62	....	114. 87
New Hampshire	1880	17	6, 500	382. 35	....	....
	1889	25	11, 872	474. 88	$92. 53	....
Massachusetts	1880	2, 053	897, 923	437. 37	....	....
	1889	2, 551	1, 039, 708	407. 57	....	29. 80
Rhode Island	1880	811	517, 123	637. 64	....	....
	1889	746	330, 091	442. 48	....	195. 16
Connecticut	1880	1, 224	693, 663	566. 72	....	....
	1889	1, 327	662, 961	499. 59	....	67 13
New York	1880	10, 375	5, 775, 013	556. 63	....	....
	1889	9, 141	4, 679, 356	511. 91	....	44. 72
New Jersey	1880	1, 243	833, 891	670. 87	....	....
	1889	881	453, 020	514. 21	....	156. 66
Pennsylvania	1880	1, 897	897, 472	473. 10	....	....
	1889	2, 394	963, 913	402. 64	....	70. 46
Delaware	1880	219	54, 179	247. 39	....	....
	1889	367	137, 372	374. 31	126. 92	....
Maryland	1880	2, 489	1. 032, 135	414. 68	....	....
	1889	1, 933	749, 875	387. 93	....	26. 75
District of Columbia	1880	230	$82, 050	$356. 74	....	....
	1889	342	63, 379	185. 32	....	$171. 42
Virginia	1880	479	185, 451	387. 16	....	....
	1889	573	207, 667	362. 42	....	24. 74
North Carolina	1880	268	104, 955	391. 62	....	....
	1889	384	98, 619	256. 82	....	134. 80
South Carolina	1880	328	150, 286	458. 19	....	....
	1889	423	159, 111	376. 15	....	82. 04
Georgia	1880	481	320, 727	666. 79	....	....
	1889	659	279, 535	424. 18	....	242. 61
Florida	1880	548	158, 816	289. 81	....	....
	1889	738	280, 085	379. 52	$89. 71	....
Alabama	1880	702	251, 220	357. 86	....	....
	1889	587	164, 086	279. 53	....	78. 33
Mississippi	1880	......	....	....	....	....
	1889	181	37, 430	206. 80	....	....
Louisiana	1880	514	506, 405	985. 22	....	....
	1889	1, 047	410, 839	392. 40	....	592. 82
Texas	1880	344	163, 051	473. 99	....	....
	1889	186	77, 362	415. 92	....	58. 07

COMPARATIVE STATISTICS—Continued.

TABLE 27.—STEAMER TRAFFIC IN 1880 AND 1889—TONS OF FREIGHT MOVED AND PASSENGERS CARRIED BY STEAMERS IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES.

STATES AND YEARS.		Freight in tons. (a)	PASSENGERS.		
			Total.	Regular.	Ferry.
Total	1880	9, 504, 744	152, 784, 517	11, 078, 155	141, 706, 362
	1889	28, 791, 438	170, 225, 458	11, 581, 446	158, 644, 012
Maine	1880	239, 498	529, 622	319, 918	209, 704
	1889	1, 153, 379	1, 384, 148	960, 379	423, 769
New Hampshire	1880	....	7, 600	7, 600	....
	1889	24, 220	108, 225	8, 225	100, 000
Massachusetts	1880	694, 079	13, 035, 790	1, 773, 855	11, 261, 935
	1889	2, 891, 148	17, 147, 560	1, 659, 528	15, 488, 032
Rhode Island	1880	416, 939	831, 078	796, 078	35, 000
	1889	994, 306	467, 768	459, 768	8, 000
Connecticut	1880	854, 610	973, 268	450, 018	523, 250
	1889	1, 941, 500	966, 461	653, 709	312, 752
New York	1880	3, 270, 839	93, 298, 059	3, 962, 950	89, 335, 109
	1889	11, 043, 500	128, 848, 933	4, 991, 352	123, 857, 581
New Jersey	1880	519, 663	39, 984, 813	2, 356, 535	37, 628, 278
	1889	419, 662	15, 143, 574	344, 160	14, 799, 414
Pennsylvania	1880	1, 061, 832	1, 210, 864	709, 614	501, 250
	1889	1, 286, 659	1, 405, 898	1, 193, 730	212, 168
Delaware	1880	152, 760	67, 000	67, 000	....
	1889	339, 880	98, 949	98, 949	....
Maryland	1880	993, 953	906, 552	330, 552	576, 000
	1889	1, 997, 360	1, 808, 004	491, 119	1, 316, 885
District of Columbia	1880	63, 500	87, 009	87, 009	....
	1889	103, 600	625, 543	324, 552	300, 991
Virginia	1880	139, 048	1, 555, 909	53, 509	1, 502, 400
	1889	1, 072, 135	1, 535, 666	61, 516	1, 474, 150
North Carolina	1880	189, 219	29, 421	29, 421	....
	1889	1, 410, 071	66, 343	66, 343	....
South Carolina	1880	88, 218	135, 604	17, 168	118, 436
	1889	502, 500	150, 751	25, 288	125, 463
Georgia	1880	114, 030	23, 335	23, 335	....
	1889	1, 858, 000	76, 976	67, 111	9, 865
Florida	1880	76, 728	39, 220	39, 220	....
	1889	385, 187	274, 149	114, 040	160, 109
Alabama	1880	182, 987	51, 237	36, 237	15, 000
	1889	225, 000	34, 140	34, 140	....
Mississippi	1880	....	....	....	....
	1889	86, 500	2, 605	2, 605	....
Louisiana	1880	278, 469	13, 533	13, 533	....
	1889	568, 259	73, 777	18, 944	54, 833
Texas	1880	168, 372	4, 603	4, 603	....
	1889	488, 632	5, 988	5, 988	....

a Exclusive of freight carried by ferryboats.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880–1889—NUMBER AND TONNAGE OF ALL STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT REGISTERED IN THE CUSTOMS DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO FOR THE 10 YEARS 1880–1889.

SUMMARY.

YEARS AND CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	175, 255	26, 792, 836	26, 029	7, 349, 172	141, 505	17, 859, 237	7, 721	1, 584, 427
1880	17, 484	2, 657, 349	2, 251	631, 302	14, 609	1, 912, 800	624	113, 247
1881	17, 589	2, 652, 319	2, 364	644, 204	14, 576	1, 884, 739	649	123, 376
1882	17, 897	2, 714, 281	2, 532	692, 959	14, 593	1, 876, 736	772	144, 586
1883	17, 856	2, 770, 017	2, 584	730, 308	14, 500	1, 889, 438	772	150, 271
1884	17, 922	2, 819, 586	2, 693	755, 754	14, 489	1, 918, 006	740	145, 826
1885	17, 771	2, 781, 791	2, 671	773, 444	14, 354	1, 860, 058	746	148, 289
1886	17, 362	2, 659, 448	2, 662	763, 302	13, 937	1, 742, 766	763	153, 380
1887	17, 029	2, 595, 307	2, 680	773, 823	13, 652	1, 665, 070	697	156, 414
1888	17, 180	2, 587, 089	2, 763	785, 164	13, 459	1, 584, 309	958	217, 616
1889	17, 165	2, 555, 649	2, 829	798, 912	13, 336	1, 525, 315	1, 000	231, 422

1880

YEARS AND CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	17, 484	2, 657, 349	2, 251	631, 302	14, 609	1, 912, 800	624	113, 247
Maine	2, 643	508, 729	85	16, 975	2, 556	491, 348	2	406
Passamaquoddy	197	23, 510	11	4, 707	186	18, 803	....	....
Machias	176	19, 355	4	165	172	19, 190	....	....
Frenchman Bay	243	14, 849	1	32	242	14, 817	....	....
Castine	319	19, 082	1	25	318	19, 057	....	....
Bangor	174	26, 686	7	557	167	26, 129	....	....
Belfast	236	47, 064	2	97	234	46, 967	....	....
Waldoboro	421	84, 017	9	891	411	82, 871	1	255
Wiscasset	164	9, 851	3	138	161	9, 713	....	....
Bath	274	135, 976	22	3, 057	251	132, 768	1	151
Portland and Falmouth	369	118, 700	23	7, 201	346	111, 499	....	....
Saco	18	655	2	105	16	550	....	....
Kennebunk	43	8, 673	....	....	43	8, 673	....	....
York	9	311	....	....	9	311	....	....
New Hampshire:								
Portsmouth	74	9, 688	5	206	69	9, 482	....	....

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880–1889—Continued.

1880—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Massachusetts	2, 299	430, 182	152	48, 687	2, 136	378, 333	11	3, 162
Newburyport	66	13, 188	13	773	51	12, 328	2	87
Gloucester	476	28, 195	4	73	472	28, 122		
Salem and Beverly	68	6, 651	4	811	64	5, 840		
Marblehead	61	2, 419			61	2, 419		
Boston and Charlestown	808	264, 263	89	26, 381	719	237, 882		
Plymouth	51	2, 963	2	464	49	2, 499		
Barnstable	340	30, 156	1	90	339	30, 066		
Nantucket	16	1, 306	4	1, 080	12	226		
Edgartown	24	1, 540			24	1, 540		
New Bedford	265	44, 838	15	2, 963	250	41, 875		
Fall River	124	34, 663	20	16, 052	95	15, 536	9	3, 075
Rhode Island	300	41, 106	59	24, 518	241	16, 588		
Providence	125	34, 386	30	22, 274	95	12, 112		
Newport	144	5, 271	21	1, 968	123	3, 303		
Bristol and Warren	31	1, 449	8	276	23	1, 173		
Connecticut	822	82, 742	108	30, 047	641	44, 299	73	8, 396
Stonington	124	7, 803	9	1, 163	115	6, 640		
New London	200	22, 232	37	13, 334	160	8, 609	3	289
Middletown	106	14, 066	25	5, 917	77	7, 508	4	641
New Haven	226	28, 178	25	6, 462	137	14, 556	64	7, 160
Fairfield	166	10, 463	12	3, 171	152	6, 986	2	306
New York	4, 009	934, 950	850	292, 629	2, 754	560, 556	405	81, 765
New York	3, 721	918, 057	824	290, 674	2, 495	548, 187	402	79, 196
Sag Harbor	288	16, 893	26	1, 955	259	12. 369	3	2. 569
New Jersey	1, 087	87, 556	113	17, 743	906	58, 123	68	11, 690
Newark	64	5, 316	27	2, 808	37	2, 508		
Perth Amboy	435	36, 722	62	10, 212	312	15, 849	61	10, 661
Little Egg Harbor	72	5, 583	1	167	71	5, 416		
Great Egg Harbor	127	14, 859	2	36	125	14, 823		
Bridgeton	314	16, 153	3	149	311	16, 004		
Burlington	75	8, 923	18	4, 371	50	3, 523	7	1, 029
Pennsylvania: Philadelphia	941	209, 112	269	72, 201	643	132, 089	29	4, 822
Delaware: Delaware	182	16, 287	21	4, 042	159	12, 128	2	117
Maryland	1, 788	121, 021	139	38, 742	1, 645	81, 856	4	423
Baltimore	1, 013	102, 139	138	38, 723	871	62, 993	4	423
Annapolis	118	2, 262			118	2, 262		
Eastern	657	16, 620	1	19	656	16, 601		
District of Columbia: Georgetown	91	8, 771	33	6, 851	58	1, 920		
Virginia	1, 150	33, 555	86	6, 716	1, 061	26, 640	3	199
Alexandria	99	3, 945	12	754	87	3, 191		
Tappahannock	102	2, 669	2	251	100	2, 418		
Yorktown	142	2, 436			141	2, 393	1	43
Richmond	39	4, 657	16	986	21	3, 515	2	156
Petersburg	3	47	2	31	1	16		
Norfolk and Portsmouth	407	14, 521	54	4, 694	353	9, 827		
Cherrystone	358	5, 280			358	5, 280		
North Carolina	330	12, 669	41	3, 511	289	9, 158		
Albemarle	76	2, 773	21	1, 835	55	938		
Pamlico	106	2, 629	6	384	100	2, 245		
Beaufort	70	1, 096			70	1, 096		
Wilmington	78	6, 171	14	1, 292	64	4, 879		
South Carolina	223	11, 482	49	6, 414	173	5, 017	1	51
Georgetown	19	1, 002	14	613	5	389		
Charleston	182	9, 712	31	5, 586	151	4, 126		
Beaufort	22	768	4	215	17	502	1	51
Georgia	119	21, 118	33	11, 764	86	9, 354		
Savannah	72	14, 310	18	10, 504	54	3, 806		
Brunswic	40	5, 286	12	966	28	4, 320		
St. Mary	7	1, 522	3	294	4	1, 228		

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1880—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Florida	395	33, 761	72	8, 429	323	25, 332		
Fernandina	18	4, 938	1	24	17	4, 914		
St. John	47	4, 561	29	2, 140	18	2, 421		
St. Augustine	2	60	1	27	1	33		
Key West	152	7, 082	11	3, 243	141	3, 839		
St. Mark	30	2, 327	7	601	23	1, 726		
Apalachicola	32	2, 504	7	1, 239	25	1, 265		
Pensacola	114	12, 289	16	1, 155	98	11, 134		
Alabama:								
Mobile	121	15, 291	44	7, 005	73	7, 937	4	349
Mississippi:								
Pearl River	149	4, 966	12	816	119	2, 970	18	1, 180
Louisiana	497	61, 625	48	29, 567	447	31, 958	2	100
New Orleans	396	57, 848	21	27, 920	375	29, 928		
Teche	101	3, 777	27	1, 647	72	2, 030	2	100
Texas	264	12, 738	32	4, 439	230	7, 712	2	587
Galveston	184	9, 780	28	3, 444	154	5, 749	2	587
Saluria	37	838			37	838		
Corpus Christi	28	898			28	898		
Brazos de Santiago	15.	1, 222	4	995	11	227		

1881

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	17, 589	2, 652, 319	2, 364	644, 204	14, 576	1, 884, 739	649	123, 376
Maine	2, 561	504, 099	88	16, 471	2, 471	487, 222	2	406
Passamaquoddy	190	22, 383	11	4, 707	179	17, 676		
Machias	155	14, 503	4	89	151	14, 414		
Frenchman Bay	243	15, 045	2	45	241	15, 000		
Castine	311	18, 870	1	25	310	18, 845		
Bangor	160	25, 368	8	539	152	24, 829		
Belfast	230	46, 024	2	97	228	45, 927		
Waldoboro	403	83, 915	8	1, 008	394	82, 652	1	255
Wiscasset	158	8, 722	3	138	155	8, 584		
Bath	272	140, 543	25	3, 019	246	137, 373	1	151
Portland and Falmouth	369	118, 235	22	6, 699	347	111, 536		
Saco	19	1, 559	2	105	17	1. 454		
Kennebunk	39	8, 559			39	8, 559		
York	12	373			12	373		
New Hampshire:								
Portsmouth	74	9, 841	7	249	67	9, 592		
Massachusetts	2, 235	415, 109	146	46, 603	2, 078	364, 933	11	3, 573
Newburyport	64	12, 445	16	775	46	11, 583	2	87
Gloucester	469	27, 302	6	120	463	27, 182		
Salem and Beverly	62	5, 409	1	14	61	5, 395		
Marblehead	53	1, 791	1	16	52	1, 775		
Boston and Charlestown	803	253, 551	88	25, 913	715	227, 638		
Plymouth	47	2, 444	1	325	46	2, 119		
Barnstable	315	27, 817			315	27, 817		
Nantucket	16	1, 349	3	1, 070	13	279		
Edgartown	25	1, 906	1	11	24	1, 895		
New Bedford	256	43, 231	11	2, 308	245	40, 923		
Fall River	125	37, 864	18	16, 051	98	18, 327	9	3, 486
Rhode Island	302	38, 399	54	21, 351	248	17, 048		
Providence	131	31, 727	27	19, 491	104	12, 236		
Newport	136	4, 844	17	1, 656	119	3, 188		
Bristol and Warren	35	1, 828	10	204	25	1, 624		
Connecticut	828	87, 142	108	30, 379	635	44, 878	85	11, 885
Stonington	118	8, 263	9	1, 187	109	7, 076		
New London	198	23, 552	37	13, 607	154	8, 761	7	1, 184
Middletown	105	15, 404	21	5, 668	70	6, 799	14	2, 937
New Haven	237	30, 304	28	6, 742	146	15, 946	63	7, 616
Fairfield	170	9, 619	13	3, 175	156	6. 296	1	148
New York	4, 095	934, 860	925	305, 741	2, 759	545, 282	411	83, 837
New York	3, 801	917, 651	894	303, 394	2, 499	532, 989	408	81, 268
Sag Harbor	294	17, 209	31	2, 347	260	12, 293	3	2, 569

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1881—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
New Jersey	1,126	96,150	123	18,751	923	61,592	80	15,807
Newark	58	4,485	30	2,977	28	1,508		
Perth Amboy	457	43,510	68	11,172	316	17,560	73	14,778
Little Egg Harbor	67	5,237	1	167	66	5,070		
Great Egg Harbor	135	16,548	4	65	131	16,483		
Bridgeton	338	17,694	3	149	335	17,545		
Burlington	71	8,676	17	4,221	47	3,426	7	1,029
Pennsylvania:								
Philadelphia	936	209,568	269	70,337	637	133,967	30	5,264
Delaware:								
Delaware	176	16,090	23	4,140	153	11,950		
Maryland	1,840	118,981	142	38,478	1,695	80,254	3	249
Baltimore	1,046	99,739	141	38,459	902	61,031	3	249
Annapolis	120	2,273			120	2,273		
Eastern	674	16,969	1	19	673	16,950		
District of Columbia:								
Georgetown	88	9,236	38	7,668	50	1,568		
Virginia	1,190	33,343	96	7,896	1,092	25,291	2	156
Alexandria	100	3,628	12	756	88	2,872		
Tappahannock	130	3,107	4	356	126	2,751		
Yorktown	135	1,994			135	1,994		
Richmond	57	5,955	18	2,031	37	3,768	2	156
Petersburg	4	264	3	74	1	190		
Norfolk and Portsmouth	426	13,326	59	4,679	367	8,647		
Cherrystone	338	5,069			338	5,069		
North Carolina	347	15,765	49	4,034	298	11,731		
Albemarle	79	3,093	28	2,139	51	954		
Pamlico	114	2,700	7	457	107	2,243		
Beaufort	65	1,059			65	1,059		
Wilmington	89	8,913	14	1,438	75	7,475		
South Carolina	222	11,737	44	6,496	178	5,241		
Georgetown	11	595	8	220	3	375		
Charleston	188	10,057	32	6,080	156	3,977		
Beaufort	23	1,085	4	196	19	889		
Georgia	131	26,427	36	16,029	95	10,398		
Savannah	81	19,409	20	14,542	61	4,867		
Brunswick	47	6,896	14	1,372	33	5,524		
St. Mary	3	122	2	115	1	7		
Florida	385	28,981	75	8,351	310	20,630		
Fernandina	20	4,316	3	408	17	3,908		
St. John	48	3,966	29	2,024	19	1,942		
St. Augustine	3	73	1	27	2	46		
Key West	143	5,610	9	2,222	134	3,388		
St. Mark	20	1,598	7	412	13	1,186		
Apalachicola	31	1,412	6	1,157	25	255		
Pensacola	120	12,006	20	2,101	100	9,905		
Alabama:								
Mobile	130	16,272	46	6,585	80	9,338	4	349
Mississippi:								
Pearl River	159	6,527	10	656	130	4,608	19	1,263
Louisiana	489	58,377	47	29,320	442	29,057		
New Orleans	399	55,085	21	27,920	378	27,165		
Teche	90	3,292	26	1,400	64	1,892		
Texas	275	15,415	38	4,669	235	10,159	2	587
Galveston	195	12,465	34	4,013	159	7,865	2	587
Saluria	31	772			31	772		
Corpus Christi	34	1,241			34	1,241		
Brazos de Santiago	15	937	4	656	11	281		

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1882

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	17,897	2,714,281	2,532	692,959	14,593	1,876,736	772	144,586
Maine	2,590	525,449	93	16,657	2,494	507,819	3	973
Passamaquoddy	190	21,778	14	3,975	176	17,803		
Machias	166	14,400	4	75	162	14,325		
Frenchman Bay	244	14,532	4	75	240	14,457		
Castine	292	16.778			292	16,778		
Bangor	168	26,499	8	404	160	26,095		
Belfast	237	49,359	3	146	234	49,213		
Waldoboro	409	91,137	5	815	403	90,067	1	255
Wiscasset	149	8,040	2	84	147	7,956		
Bath	289	155,477	27	3,138	260	151,621	2	718
Portland and Falmouth	374	116,600	23	7,685	351	108,915		
Saco	21	1,884	3	260	18	1,624		
Kennebunk	39	8,614			39	8,614		
York	12	351			12	351		
New Hampshire:								
Portsmouth	65	9,045	7	254	58	8,791		
Massachusetts	2,252	429,092	160	50,921	2,081	374,598	11	3,573
Newburyport	61	11,637	15	741	44	10,809	2	87
Gloucester	478	27,850	5	165	473	27,685		
Salem and Beverly	64	5,291	3	44	61	5,247		
Marblehead	57	1,963	1	16	56	1,947		
Boston and Charlestown	835	266,964	102	29,842	733	237,122		
Plymouth	40	2,071	1	159	39	1,912		
Barnstable	322	30,171			322	30,171		
Nantucket	16	1,312	3	1,069	13	243		
Edgartown	23	1,439			23	1,439		
New Bedford	232	42,187	12	2,727	220	39,460		
Fall River	124	38,207	18	16,158	97	18,563	9	3,486
Rhode Island	309	44,240	54	24,340	255	19,900		
Providence	144	37,544	29	22,440	115	15,104		
Newport	129	4,657	16	1,613	113	3,044		
Bristol and Warren	36	2,039	9	287	27	1,752		
Connecticut	866	96,410	117	32,066	595	41,130	154	23,214
Stonington	110	8,223	11	1,329	99	6,894		
New London	185	25,914	36	15,912	139	7,969	10	2,033
Middletown	104	14,501	19	4,325	66	6,323	19	3,853
New Haven	291	38,550	33	7,048	134	14,322	124	17,180
Fairfield	176	9,222	18	3,452	157	5,622	1	148
New York	4,101	945,231	987	327,974	2,679	530,150	435	87,107
New York	3,830	928,658	954	325,427	2,444	518,693	432	84,538
Sag Harbor	271	16,573	33	2,547	235	11,457	3	2,569
New Jersey	1,194	101,466	135	20,237	953	60,025	106	21,204
Newark	62	4,981	35	3,450	27	1,531		
Perth Amboy	517	48,648	73	12,048	345	16,425	99	20,175
Little Egg Harbor	66	4,867	2	215	64	4,652		
Great Egg Harbor	139	16.652	3	48	136	16,604		
Bridgeton	340	17,759	3	149	337	17,610		
Burlington	70	8,559	19	4,327	44	3,203	7	1,029
Pennsylvania:								
Philadelphia	895	205,663	279	75,268	587	125,179	29	5,216
Delaware:								
Delaware	165	16,669	19	3,769	144	12,304	2	596
Maryland	1,922	125,176	153	47,626	1,766	77,301	3	249
Baltimore	1,090	104,475	150	47,318	937	56,908	3	249
Annapolis	120	2,273			120	2,273		
Eastern	712	18,428	3	308	709	18,120		
District of Columbia:								
Georgetown	87	10,568	38	8,278	49	2,290		
Virginia	1,261	37,311	107	8,545	1,152	28,610	2	156
Alexandria	87	3,654	12	699	75	2,955		
Tappahannock	140	3,230	5	279	135	2,951		
Yorktown	131	2,103			131	2,103		
Richmond	59	6,468	20	2,062	37	4,250	2	156
Petersburg	4	278	1	16	3	262		
Norfolk and Portsmouth	478	16,041	67	5,470	411	10,571		
Cherrystone	362	5,537	2	19	360	5,518		

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1882—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
North Carolina	336	13, 340	56	4, 686	280	8, 654		
Albemarle	74	2, 860	27	1, 999	47	861		
Pamlico	118	3, 033	12	861	106	2, 172		
Beaufort	67	1, 158			67	1, 158		
Wilmington	77	6, 289	17	1, 826	60	4, 463		
South Carolina	228	10, 696	46	4, 993	182	5, 703		
Georgetown	17	1, 164	10	422	7	742		
Charleston	189	8, 572	31	4, 258	158	4, 314		
Beaufort	22	960	5	313	17	647		
Georgia	120	26, 684	38	16, 708	82	9, 976		
Savannah	76	20, 732	22	15, 826	54	4, 906		
Brunswick	40	5, 442	14	767	26	4, 675		
St. Mary	4	510	2	115	2	395		
Florida	419	30, 161	86	9, 986	333	20, 175		
Fernandina	19	3, 853	2	322	17	3, 531		
St. John	59	5, 259	37	2 855	22	2, 404		
St. Augustine	4	67			4	67		
Key West	153	6, 462	11	2, 962	142	3, 500		
St. Mark	42	3, 042	8	423	34	2, 619		
Apalachicola	35	2, 452	9	1, 242	26	1, 210		
Pensacola	107	9, 026	19	2, 182	88	6, 844		
Alabama: Mobile	149	16, 611	51	7, 209	94	9, 228	4	174
Mississippi: Pearl River	158	6, 110	18	1, 102	121	3, 745	19	1, 263
Louisiana	503	52, 895	51	28, 631	452	24, 264		
New Orleans	411	49, 941	24	27, 442	387	22, 499		
Teche	92	2, 954	27	1, 189	65	1, 765		
Texas	277	11, 464	37	3, 709	236	6, 894	4	861
Galveston	191	8, 102	33	3, 149	154	4, 092	4	861
Saluria	29	732			29	732		
Corpus Christi	43	1, 908	1	112	42	1, 796		
Brazos de Santiago	14	722	8	448	11	274		

1883

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	17, 856	2, 770, 017	2, 584	730, 308	14, 500	1, 889, 438	772	150, 271
Maine	2, 608	533, 791	101	18, 954	2, 504	513, 864	3	973
Passamaquoddy	192	20, 291	13	3, 216	179	17, 075		
Machias	181	16, 737	5	90	176	16, 647		
Frenchman Bay	250	14, 609	6	110	244	14, 499		
Castine	270	16, 195	1	25	269	16, 170		
Bangor	168	25, 659	9	717	159	24, 942		
Belfast	245	48, 465	4	157	241	48, 308		
Waldoboro	408	93, 709	4	793	403	92, 661	1	255
Wiscasset	150	7, 684	2	84	148	7, 600		
Bath	296	165, 795	28	4, 634	266	160, 443	2	718
Portland and Falmouth	381	117, 120	25	8, 825	356	108, 295		
Saco	20	2, 320	4	303	16	2, 017		
Kennebunk	36	4, 864			36	4, 864		
York	11	343			11	343		
New Hampshire: Portsmouth	66	9, 062	8	413	58	8, 649		
Massachusetts	2, 232	442, 009	177	64, 309	2, 043	373, 705	12	3, 995
Newburyport	70	18, 423	15	906	53	17, 430	2	87
Gloucester	503	31, 342	6	180	497	31, 162		
Salem and Beverly	48	4, 060	3	43	45	4, 017		
Marblehead	48	2, 540			48	2, 540		
Boston and Charlestown	791	261, 424	114	36, 694	677	224, 730		
Plymouth	45	2, 701	1	344	44	2, 357		
Barnstable	332	32, 736	1	7	331	32, 729		
Nantucket	17	1, 376	[illegible]	1, 062	15	314		
Edgartown	24	1, 362			24	1, 362		
New Bedford	233	41, 228	13	2, 786	220	38, 442		
Fall River	121	44, 817	22	22, 287	89	18, 622	10	3, 908

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1883—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Rhode Island	282	42, 012	49	23, 707	233	18, 305	....	....
Providence	139	36, 226	30	21, 800	109	14, 426	....	....
Newport	110	4, 562	13	1, 722	97	2, 840	....	....
Bristol and Warren	33	1, 224	6	185	27	1, 039	....	....
Connecticut	865	102, 975	135	34, 203	551	40, 776	179	27, 996
Stonington	99	6, 455	12	1, 326	87	5, 129	....	....
New London	187	28, 726	41	16, 425	129	8, 289	17	4, 012
Middletown	99	14, 586	19	1, 445	60	6, 043	20	4, 098
New Haven	312	43, 535	42	7, 731	130	16, 144	140	19, 660
Fairfield	168	9, 673	21	4. 276	145	5, 171	2	226
New York	4, 120	943, 587	1, 006	338, 604	2, 671	516, 599	443	88, 384
New York	3, 870	928, 333	978	336, 327	2, 451	505, 560	441	86, 446
Sag Harbor	250	15, 254	28	2, 277	220	11, 039	2	1, 938
New Jersey	1, 193	99, 519	127	17, 982	977	60, 156	89	21, 381
Newark	70	6, 002	32	3, 358	38	2, 644	....	....
Perth Amboy	505	47, 991	66	9, 840	357	17, 799	82	20, 352
Little Egg Harbor	65	4, 652	2	55	63	4, 597	....	....
Great Egg Harbor	127	14, 530	3	182	124	14, 348	....	....
Bridgeton	354	17, 714	4	181	350	17, 533	....	....
Burlington	72	8, 630	20	4, 366	45	3, 235	7	1, 029
Pennsylvania:								
Philadelphia	900	221, 508	289	79, 022	582	137, 270	29	5, 216
Delaware:								
Delaware	177	17, 678	21	3, 934	156	13, 744	....	....
Maryland	1, 981	129, 048	154	47, 371	1, 823	80, 500	4	1, 777
Baltimore	1, 106	107, 113	151	47, 024	951	58, 912	4	1, 177
Annapolis	122	2, 548	1	45	121	2, 503	....	....
Eastern	753	19, 387	2	302	751	19. 085	....	....
District of Columbia:								
Georgetown	84	10, 746	35	8, 406	49	2, 340	....	....
Virginia	1, 230	38, 285	104	8, 398	1, 126	29, 887	....	....
Alexandria	84	3, 525	12	481	72	3, 044	....	....
Tappahannock	120	3, 137	3	170	117	2, 967	....	....
Yorktown	202	3, 256	1	57	201	3, 199	....	....
Richmond	64	7, 385	19	2, 014	45	5, 371	....	....
Petersburg	5	175	4	162	1	13	....	....
Norfolk and Portsmouth	410	15, 447	63	5, 495	347	9, 952	....	....
Cherrystone	345	5, 360	2	19	343	5, 341	....	....
North Carolina	340	14, 875	55	4, 788	285	10, 087	....	....
Albemarle	64	2, 746	25	2, 129	39	617	....	....
Pamlico	125	3, 454	14	932	111	2, 522	....	....
Beaufort	73	1, 247	1	33	72	1, 214	....	....
Wilmington	78	7, 428	15	1, 694	63	5, 734	....	....
South Carolina	219	13, 457	45	6, 259	174	7, 198	....	....
Georgetown	18	2, 217	9	706	9	1, 511	....	....
Charleston	175	9, 387	31	5, 240	144	4, 147	....	....
Beaufort	26	1, 853	5	313	21	1, 540	....	....
Georgia	120	34, 560	42	21, 525	78	13, 035	....	....
Savannah	79	25, 756	31	20, 685	48	5, 071	....	....
Brunswick	37	8, 648	8	691	29	7, 957	....	....
St. Mary	4	156	3	149	1	7	....	....
Florida	442	34, 055	87	9, 878	355	24, 177	....	....
Fernandina	16	3, 167	2	322	14	2, 845	....	....
St. John	59	5, 442	39	2, 551	20	2, 891	....	....
St. Augustine	4	257	....	....	4	257	....	....
Key West	154	6, 864	12	3, 495	142	3, 369	....	....
St. Mark	45	3, 179	5	203	40	2, 976	....	....
Apalachicola	34	3, 037	10	1, 603	24	1, 434	....	....
Pensacola	130	12, 109	19	1, 704	111	10, 405	....	....
Alabama:								
Mobile	154	13, 676	45	5, 781	99	7, 481	10	414
Mississippi:								
Pearl River	135	6, 099	14	912	121	5, 187	....	....

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1883—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Louisiana	434	52, 403	54	32, 554	380	19, 849		
New Orleans	350	49, 457	26	30, 984	324	18, 473		
Teche	84	2, 946	28	1, 570	56	1, 376		
Texas	274	10, 672	36	3, 308	235	6, 629	3	735
Galveston	197	8, 313	31	2, 702	163	4, 876	3	735
Saluria	27	696			27	696		
Corpus Christi	38	972	2	158	36	814		
Brazos de Santiago	12	691	3	448	9	243		

1884

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	17, 922	2, 819, 586	2, 693	755, 754	14, 489	1, 918, 006	740	145, 826
Maine	2, 578	543, 432	114	22, 965	2, 462	519, 749	2	718
Passamaquoddy	187	19, 973	16	4, 416	171	15, 557		
Machias	194	20, 952	7	160	187	20, 792		
Frenchman Bay	236	14, 704	5	125	231	14, 579		
Castine	252	14, 138	1	25	251	14, 113		
Bangor	182	27, 525	12	806	170	26, 719		
Belfast	252	51, 677	4	157	248	51, 520		
Waldoboro	372	84, 671	4	1, 138	368	83, 533		
Wiscasset	150	7, 326			150	7, 326		
Bath	299	173, 749	32	4, 400	265	168, 631	2	718
Portland and Falmouth	387	119, 900	30	11, 507	357	108, 393		
Saco	17	2, 504	3	231	14	2, 273		
Kennebunk	38	5, 917			38	5, 917		
York	12	396			12	396		
New Hampshire: Portsmouth	70	10, 574	7	378	63	10, 196		
Massachusetts	2, 156	437, 364	188	60, 626	1, 957	373, 025	11	3, 713
Newburyport	72	18, 910	16	916	54	17, 907	2	87
Gloucester	496	31, 762	1	69	495	31, 693		
Salem and Beverly	41	1, 772	3	31	38	1, 741		
Marblehead	42	2, 777			42	2, 777		
Boston and Charlestown	789	261. 838	132	34, 382	657	227, 456		
Plymouth	45	2, 408			45	2, 408		
Barnstable	312	30, 936			312	30, 936		
Nantucket	19	1, 537	2	1, 062	17	475		
Edgartown	26	1, 572			26	1, 572		
New Bedford	208	36, 979	12	2, 320	196	34, 659		
Fall River	106	46, 873	22	21, 846	75	21, 401	9	3, 626
Rhode Island	291	41, 499	59	21, 687	232	19, 812		
Providence	142	34, 304	37	19, 889	105	14, 415		
Bristol and Warren	34	1, 891	7	218	27	1, 673		
Newport	115	5, 304	15	1, 580	100	3, 724		
Connecticut	861	109, 198	152	35, 617	538	46, 720	171	26, 861
Stonington	103	6, 465	12	1, 376	91	5, 089		
New London	192	32, 681	46	16, 516	131	12, 272	15	3, 893
Middletown	97	14. 332	19	4, 269	59	6, 274	19	3, 789
New Haven	297	45, 195	47	8, 499	115	17, 743	135	18, 953
Fairfield	172	10, 525	28	4, 957	142	5, 342	2	226
New York	4, 236	978, 371	1, 072	363, 751	2, 709	523, 123	455	91, 497
New York	3, 986	964, 556	1, 044	361. 439	2, 488	512, 401	454	90, 716
Sag Harbor	250	13, 815	28	2, 312	221	10, 722	1	781
New Jersey	1, 103	91, 595	110	16, 423	945	61, 125	48	14, 047
Newark	79	7, 369	35	3, 510	44	3, 859		
Perth Amboy	385	36, 706	48	8, 178	289	14, 481	48	14, 047
Little Egg Harbor	60	4, 396	1	48	59	4, 348		
Great Egg Harbor	135	17, 619	2	170	133	17, 449		
Bridgeton	378	17, 979	5	261	373	17, 718		
Burlington	66	7, 526	19	4, 256	47	3, 270		
Pennsylvania: Philadelphia	894	218, 947	289	74, 116	574	138, 731	31	6, 100
Delaware: Delaware	182	19, 939	25	6, 291	157	13, 648		

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1884—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Maryland	2,168	138,871	174	50,497	1,986	86,562	8	1,812
Baltimore	1,188	115,470	172	50,391	1,008	63,267	8	1,812
Annapolis	162	3,249			162	3,249		
Eastern	818	20,152	2	106	816	20,046		
District of Columbia:								
Georgetown	82	10,968	31	7,902	51	3,066		
Virginia	1,189	41,305	111	8,747	1,078	32,558		
Alexandria	88	5,952	14	566	74	5,386		
Tappahannock	130	3,243	2	92	128	3,151		
Richmond	65	7,908	20	2,091	45	5,817		
Petersburg	5	217	4	210	1	7		
Yorktown	219	4,058	3	178	216	3,880		
Norfolk and Portsmouth	397	15,335	66	5,591	331	9,744		
Cherrystone	285	4,592	2	19	283	4,573		
North Carolina	353	17,096	63	5,341	290	11,755		
Albemarle	67	2,786	25	2,140	42	646		
Pamlico	118	3,227	17	1,123	101	2,104		
Beaufort	86	1,614	2	152	84	1,462		
Wilmington	82	9,469	19	1,926	63	7,543		
South Carolina	221	12,043	50	6,550	171	5,493		
Georgetown	21	2,381	11	834	10	1,547		
Charleston	177	8,192	33	5,307	144	2,885		
Beaufort	23	1,470	6	409	17	1,061		
Georgia	131	39,250	44	23,246	87	16,004		
Savannah	77	27,777	31	22,279	46	5,498		
Brunswick	50	10,832	12	933	38	9,899		
St. Mary	4	641	1	34	3	607		
Florida	407	30,869	52	7,951	355	22,918		
Fernandina	17	3,725	2	355	15	3,370		
St. John	12	522			12	522		
St. Augustine	6	301			6	301		
Key West	151	5,997	12	3,317	139	2,680		
St. Mark	46	1,494	8	563	38	931		
Apalachicola	30	2,178	11	1,400	19	778		
Pensacola	145	16.652	19	2,316	126	14,336		
Alabama:								
Mobile	131	10,535	41	5,600	80	4,521	10	414
Mississippi:								
Pearl River	131	5,216	12	919	119	4,297		
Louisiana	471	51,712	60	33,517	411	18,195		
New Orleans	368	48,194	27	31,688	341	16,506		
Teche	103	3,518	33	1,829	70	1,689		
Texas	267	10,802	39	3,630	224	6,508	4	664
Galveston	186	8,144	33	2,954	151	4,749	2	441
Saluria	29	548			29	548		
Corpus Christi	36	1,134	2	158	32	753	2	223
Brazos de Santiago	16	976	4	518	12	458		

1885

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	17,771	2,781,791	2,671	773,444	14,354	1,860,058	746	148,289
Maine	2,477	487,574	119	22,242	2,356	464,510	2	822
Passamaquoddy	180	18,830	18	4,169	162	14,661		
Machias	196	19,198	5	102	191	19,096		
Frenchman Bay	227	13,920	6	218	221	13,702		
Castine	251	14,483	1	25	250	14,458		
Bangor	167	23,680	12	789	155	22,891		
Belfast	255	47,748	4	157	251	47,591		
Waldoboro	349	76,588	4	1,138	344	75,195	1	255
Wiscasset	150	7,211	2	106	148	7,105		
Bath	260	145,374	28	3,530	231	141,277	1	567
Portland and Falmouth	379	114,387	36	11,777	343	102,610		
Saco	19	2,383	3	231	16	2,152		
Kennebunk	31	3,357			31	3,357		
York	13	415			13	415		

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1885—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
New Hampshire:								
Portsmouth	66	10,891	7	389	59	10,502		
Massachusetts	2,068	442,837	156	68,941	1,902	370,925	10	2,971
Newburyport	63	17,162	15	906	46	16,169	2	87
Gloucester	510	33,943	6	209	504	33,734		
Salem and Beverly	38	1,952	2	39	36	1,913		
Marblehead	44	3,036	2	73	42	2,963		
Boston and Charlestown	723	267,805	96	42,170	627	225,635		
Plymouth	35	2,038	1	344	34	1,694		
Barnstable	305	29,609			305	29,609		
Nantucket	19	1,472	2	1,062	17	410		
Edgartown	23	1,235			23	1,235		
New Bedford	209	36,446	12	2,336	197	34,110		
Fall River	99	48,139	20	21,802	71	23,453	8	2,884
Rhode Island	270	39,786	44	21,209	226	18,577		
Providence	127	32,881	30	19,492	97	13,389		
Bristol and Warren	31	1,511	3	125	28	1,386		
Newport	112	5,394	11	1,592	101	3,802		
Connecticut	833	108,420	148	36,565	522	45,960	163	25,895
Stonington	109	6,669	11	2,256	98	4,413		
New London	176	31,881	38	16,221	123	11,821	15	3,839
Middletown	94	14,115	18	4,193	56	5,938	20	3,984
New Haven	284	44,491	48	8,565	110	18,080	126	17,846
Fairfield	170	11,264	33	5,330	135	5,708	2	226
New York	4,171	986,145	1,054	366,487	2,651	525,470	466	94,188
New York	3,930	971,485	1,028	364,170	2,437	513,908	465	93,407
Sag Harbor	241	14,660	26	2,317	214	11,562	1	781
New Jersey	1,077	89,133	105	13,688	924	61,491	48	13,954
Newark	66	5,349	35	3,303	31	2,046		
Perth Amboy	374	36,709	44	7,767	282	14,988	48	13,954
Little Egg Harbor	62	4,477	3	183	59	4,294		
Great Egg Harbor	133	17,904	4	446	129	17,458		
Bridgeton	399	21,087	7	828	392	20,259		
Burlington	43	3,607	12	1,161	31	2,446		
Pennsylvania:								
Philadelphia	842	216,435	277	77,414	533	132,328	32	6,693
Delaware:								
Delaware	186	19,946	26	5,099	160	14,847		
Maryland	2,280	146,839	173	53,370	2,098	91,261	9	2,208
Baltimore	1,262	123,493	170	53,195	1,083	68,090	9	2,208
Annapolis	160	3,174	1	106	159	3,068		
Eastern	858	20,172	2	69	856	20,103		
District of Columbia:								
Georgetown	72	10,187	30	8,580	41	1,099	1	508
Virginia	1,236	45,788	101	8,346	1,135	37,442		
Alexandria	84	5,582	14	622	70	4,960		
Tappahannock	148	4,016	3	170	145	3,846		
Richmond	63	10,017	15	1,982	48	8,035		
Petersburg	6	229	4	210	2	19		
Yorktown	214	3,730	3	148	211	3,582		
Norfolk and Portsmouth	408	17,017	58	4,997	350	12,020		
Cherrystone	313	5,197	4	217	309	4,980		
North Carolina	350	14,906	62	4,739	288	10,167		
Albemarle	70	2,794	26	2,194	44	600		
Pamlico	118	2,885	16	912	102	1,973		
Beaufort	87	1,631	4	197	83	1,434		
Wilmington	75	7,596	16	1,436	59	6,160		
South Carolina	227	12,807	52	6,762	175	6,045		
Georgetown	23	2,679	12	853	11	1,826		
Charleston	183	9,419	34	5,500	149	3,919		
Beaufort	21	709	6	409	15	300		

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880–1889—Continued.

1885—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Georgia	133	35,831	51	24,024	82	11,807	....	....
Savannah	88	27,161	36	22,652	52	4,509	....	....
Brunswick	42	8,091	14	1,338	28	6,753	....	....
St. Mary	3	579	1	34	2	545	....	....
Florida	489	39,488	110	11,568	379	27,920	....	....
Fernandina	17	3,591	3	389	14	3,202	....	....
St. John	74	6,358	50	3,574	24	2,784	....	....
St. Augustine	8	332	3	276	5	56	....	....
Key West	154	7,402	15	3,658	139	3,744	....	....
St. Mark	53	1,582	9	919	44	663	....	....
Apalachicola	37	1,677	12	1,309	25	368	....	....
Pensacola	146	18,546	18	1,443	128	17,103	....	....
Alabama:								
Mobile	142	10,958	49	5,698	82	4,800	11	460
Mississippi:								
Pearl River	129	5,396	9	861	120	4,535	....	....
Louisiana	471	49,804	62	34,165	409	15,639	....	....
New Orleans	371	46,604	30	32,741	341	13,863	....	....
Techo	100	3,200	32	1,424	68	1,776	....	....
Texas	252	8,620	36	3,297	212	4,733	4	590
Galveston	180	6,804	31	2,865	147	3,572	2	367
Saluria	26	346	....	....	26	346	....	....
Corpus Christi	33	998	2	158	29	617	2	223
Brazos de Santiago	13	472	3	274	10	198	....	....

1886

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	17,362	2,659,448	2,662	763,302	13,937	1,742,766	763	153,380
Maine	2,391	459,139	116	22,043	2,271	434,824	4	2,272
Passamaquoddy	173	18,252	11	3,510	162	14,742	....	....
Machias	185	17,886	5	123	180	17,763	....	....
Frenchman Bay	241	16,003	7	494	234	15,509	....	....
Castine	234	13,079	3	55	231	13,024	....	....
Bangor	161	21,435	12	842	149	20,593	....	....
Belfast	232	41,355	2	92	230	41,263	....	....
Waldoboro	339	70,372	4	793	335	69,579	....	....
Wiscasset	141	7,617	2	106	139	7,511	....	....
Bath	259	141,913	27	3,502	228	136,139	4	2,272
Portland and Falmouth	365	105,306	39	12,280	326	93,026	....	....
Saco	19	2,191	3	231	16	1,960	....	....
Kennebunk	32	3,400	1	15	31	3,385	....	....
York	10	330	....	....	10	330	....	....
New Hampshire:								
Portsmouth	65	10,422	7	389	58	10,033	....	....
Massachusetts	2,011	435,969	166	70,424	1,834	361,794	11	3,751
Newburyport	64	16,565	14	893	48	15,585	2	87
Gloucester	494	33,228	8	273	486	32,955	....	....
Salem and Beverly	39	2,319	5	170	34	2,149	....	....
Marblehead	40	2,866	1	11	39	2,855	....	....
Boston and Charlestown	699	262,487	101	43,465	598	219,022	....	....
Plymouth	31	1,700	1	344	30	1,356	....	....
Barnstable	307	28,908	1	46	306	28,862	....	....
Nantucket	16	1,041	1	578	15	463	....	....
Edgartown	20	981	....	....	20	981	....	....
New Bedford	202	35,928	14	2,836	188	33,092	....	....
Fall River	99	49,946	20	21,808	70	24,474	9	3,664
Rhode Island	265	39,111	49	21,129	214	17,293	2	689
Providence	131	32,289	32	19,136	97	12,464	2	689
Bristol and Warren	30	1,454	3	125	27	1,329	....	....
Newport	104	5,368	14	1,868	90	3,500	....	....
Connecticut	818	109,659	153	36,400	504	47,418	161	25,841
Stonington	105	6,448	11	2,256	94	4,192	....	....
New London	172	32,468	36	16,106	121	12,360	15	4,002
Middletown	95	14,088	18	3,887	56	6,068	21	4,133
New Haven	275	45,331	48	8,544	103	19,229	124	17,558
Fairfield	171	11,324	40	5,607	130	5,569	1	148

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1886—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
New York	3,988	912,396	1,057	357,364	2,454	459,990	477	95,042
New York	3,756	898,475	1,030	354,991	2,250	449,223	476	94,261
Sag Harbor	232	13,921	27	2,373	204	10,767	1	781
New Jersey	1,107	87,738	99	13,380	958	59,949	50	14,409
Newark	71	6,768	34	3,634	37	3,134		
Perth Amboy	376	36,197	40	7,298	286	14,490	50	14,409
Little Egg Harbor	53	4,127	3	177	50	3,950		
Great Egg Harbor	133	16,788	6	461	127	16,327		
Bridgeton	431	20,280	5	679	426	19,601		
Burlington	43	3,578	11	1,131	32	2,447		
Pennsylvania:								
Philadelphia	825	225,300	266	74,837	526	143,162	33	7,301
Delaware:								
Delaware	175	16,731	26	4,061	149	12,670		
Maryland	2,233	144,882	170	54,434	2,054	88,240	9	2,208
Baltimore	1,232	122,329	165	54,120	1,058	66,001	9	2,208
Annapolis	130	2,938	1	106	129	2,832		
Eastern	871	19,615	4	208	867	19,407		
District of Columbia:								
Georgetown	67	10,081	31	8,636	35	937	1	508
Virginia	1,264	42,257	97	7,815	1,167	34,442		
Alexandria	76	4,904	10	447	66	4,457		
Tappahannock	146	4,053	3	170	143	3,883		
Richmond	58	6,641	16	1,027	42	5,614		
Petersburg	8	255	4	210	4	45		
Yorktown	213	4,289	4	820	209	3,469		
Norfolk and Portsmouth	425	16,377	58	5,005	367	11,372		
Cherrystone	338	5,738	2	136	336	5,602		
North Carolina	331	12,690	58	4,415	273	8,275		
Albemarle	71	2,883	27	2,305	44	578		
Pamlico	114	2,847	16	919	98	1,928		
Beaufort	87	1,597	2	99	85	1,498		
Wilmington	59	5,363	13	1.092	46	4,271		
South Carolina	206	11,625	49	6,229	157	5,396		
Georgetown	22	1,939	14	972	8	967		
Charleston	160	8,237	26	4,637	134	3,600		
Beaufort	24	1,449	9	620	15	829		
Georgia	131	32,463	49	23,827	82	8,636		
Savannah	90	25,580	34	22,455	56	3,125		
Brunswick	37	5,966	14	1,338	23	4,628		
St. Mary	4	917	1	34	3	883		
Florida	491	33,711	115	12,430	376	21,281		
Fernandina	15	3,309	3	389	12	2,920		
St. John	75	6,193	52	4,258	23	1,935		
St. Augustine	8	332	3	276	5	56		
Key West	173	7,851	17	4,005	156	3,846		
St. Mark	48	1,125	10	722	38	403		
Apalachicola	39	1,852	11	1,242	28	610		
Pensacola	133	13,049	19	1,538	114	11,511		
Alabama:								
Mobile	132	10,983	49	5,824	75	4,833	8	326
Mississippi:								
Pearl River	151	5,953	9	861	142	5,092		
Louisiana	453	45,680	57	32,913	396	12,767		
New Orleans	352	42,981	27	31,567	325	11,414		
Teche	101	2,699	30	1,346	71	1,353		
Texas	258	12,658	39	5,891	212	5,734	7	1,033
Galveston	190	10,604	34	5,459	151	4,335	5	810
Saluria	23	303			23	303		
Corpus Christi	33	1,302	2	158	29	921	2	223
Brazos de Santiago	12	449	3	274	9	175		

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1887

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	17,029	2,595,307	2,680	773,823	13,652	1,665,070	697	156,414
Maine	2,247	416,381	112	19,938	2,127	392,025	8	4,418
Passamaquoddy	161	17,802	13	4,647	148	13,155		
Machias	181	16,606	4	89	176	16,395	1	122
Frenchman Bay	230	13,743	8	521	222	13,222		
Castine	233	12,768	2	30	231	12,738		
Bangor	157	21,587	11	726	145	20,623	1	238
Belfast	187	33,491	2	67	185	33,424		
Waldoboro	341	70,416	5	819	336	69,597		
Wiscasset	130	8,317	1	50	129	8,267		
Bath	248	132,080	26	3,470	216	124,552	6	4,058
Portland and Falmouth	323	84,514	37	9,306	286	75,208		
Saco	17	1,597	2	198	15	1,399		
Kennebunk	30	3,157	1	15	29	3,142		
York	9	303			9	303		
New Hampshire: Portsmouth	65	10,436	7	389	58	10,047		
Massachusetts	1,887	420,897	154	70,964	1,718	341,769	15	8,164
Newburyport	38	13,153	11	801	25	12,265	2	87
Gloucester	479	32,568	7	246	472	32,322		
Salem and Beverly	51	4,757	6	182	45	4,575		
Marblehead	35	2,353	2	49	33	2,304		
Boston and Charlestown	628	249,864	92	43,014	532	202,488	4	4,362
Plymouth	25	1,553	1	344	24	1,209		
Barnstable	297	27,881	1	46	296	27,835		
Nantucket	15	458			15	458		
Edgartown	20	986			20	986		
New Bedford	198	36,379	16	4,005	182	32,374		
Fall River	101	50,945	18	22,277	74	24,953	9	3,715
Rhode Island	242	36,906	50	20,384	189	15,476	3	1,046
Providence	109	29,493	29	17,848	77	10,599	3	1,046
Bristol and Warren	27	1,368	3	125	24	1,243		
Newport	106	6,045	18	2,411	88	3,634		
Connecticut	682	95,902	156	37,475	488	49,368	38	9,059
Stonington	106	5,512	10	1,268	96	4,244		
New London	178	36,034	37	17,567	124	13,565	17	4,902
Hartford	85	12,623	21	3,962	45	4,801	19	3,860
New Haven	146	30,266	48	8,706	98	21,560		
Fairfield	167	11,467	40	5,972	125	5,198	2	297
New York	4,033	928,226	1,077	371,270	2,441	453,686	515	103,270
New York	3,793	913,575	1,049	368,246	2,230	442,840	514	102,489
Sag Harbor	240	14,651	28	3,024	211	10,846	1	781
New Jersey	1,098	89,378	102	13,614	942	59,358	54	16,406
Newark	73	6,666	34	3,761	39	2,905		
Perth Amboy	375	38,973	42	7,302	279	15,265	54	16,406
Little Egg Harbor	48	3,947	1	42	47	3,905		
Great Egg Harbor	139	17,324	7	537	132	16,787		
Bridgeton	427	19,710	6	809	421	18,901		
Burlington	36	2,758	12	1,163	24	1,595		
Pennsylvania: Philadelphia	827	215,450	269	77,070	524	129,867	34	8,513
Delaware: Delaware	188	16,382	27	3,547	161	12,835		
Maryland	2,227	140,683	162	53,828	2,056	84,648	9	2,207
Baltimore	1,200	118,192	157	53,468	1,034	62,517	9	2,207
Annapolis	149	3,215	1	106	148	3,109		
Eastern	878	19,276	4	254	874	19,022		
District of Columbia: Georgetown	77	11,097	34	9,054	41	1,301	2	742
Virginia	1,289	44,520	99	8,270	1,189	35,435	1	815
Alexandria	66	3,568	10	428	56	3,140		
Tappahannock	145	3,912	5	304	140	3,608		
Richmond	62	6,043	15	1,198	47	4,845		
Petersburg	6	195	3	165	3	30		
Yorktown	224	7,534	4	812	219	5,907	1	815
Norfolk and Portsmouth	438	17,376	59	5,167	379	12,209		
Cherrystone	348	5,892	3	196	345	5,696		

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1887—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
North Carolina	348	12, 739	63	4, 630	285	8, 109		
Albemarle	77	2, 998	27	2, 302	50	696		
Pamlico	118	3, 103	19	1, 187	99	1, 916		
Beaufort	101	1, 845	2	100	99	1, 745		
Wilmington	52	4, 793	15	1, 041	37	3, 752		
South Carolina	216	12, 537	56	6, 677	160	5, 860		
Georgetown	21	2, 063	12	860	9	1, 203		
Charleston	174	9, 522	33	5, 074	141	4, 448		
Beaufort	21	952	11	743	10	209		
Georgia	135	32, 551	50	23, 403	85	9, 148		
Savannah	89	23, 806	32	21, 687	57	2, 119		
Brunswick	43	8, 166	17	1, 682	26	6, 484		
St. Mary	3	579	1	34	2	545		
Florida	505	37, 388	108	12, 239	396	25, 117	1	32
Fernandina	14	3, 586	1	67	13	3, 519		
St. John	60	7, 309	41	4, 812	19	2, 497		
St. Augustine	11	405	3	272	8	133		
Key West	186	7, 123	19	3, 553	167	3, 570		
St. Mark	47	1, 370	10	734	38	604		
Apalachicola	40	3, 653	12	1, 389	28	2, 264	1	32
Pensacola	147	13, 942	22	1, 412	125	12, 530		
Alabama:								
Mobile	125	9, 824	53	6, 150	63	3, 136	9	538
Mississippi:								
Pearl River	156	9, 511	8	814	148	8, 697		
Louisiana	444	43, 024	55	30, 449	389	12, 575		
New Orleans	337	40, 242	23	29, 009	314	11, 233		
Teche	107	2, 782	32	1, 440	75	1, 342		
Texas	238	11, 475	38	3, 658	192	6, 613	8	1, 204
Galveston	184	9, 196	31	2, 801	147	5, 414	6	981
Saluria	15	212			15	212		
Corpus Christi	28	1, 224	2	158	24	843	2	223
Brazos de Santiago	9	418	3	274	6	144		
Paso del Norte	2	425	2	425				

1888

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	17, 180	2, 587, 089	2, 763	785, 164	13, 459	1, 584, 309	958	217, 616
Maine	2, 221	409, 664	120	22, 931	2, 088	376, 441	13	10, 292
Passamaquoddy	173	19, 947	14	5, 040	159	14, 907		
Machias	190	16, 389	5	106	185	16, 283		
Frenchman Bay	232	14, 506	13	740	219	13, 766		
Castine	242	13, 612	2	30	240	13, 582		
Bangor	144	21, 281	10	736	133	20, 307	1	238
Belfast	170	31, 321	2	84	168	31, 237		
Waldoboro	344	61, 220	6	1, 006	338	60, 214		
Wiscasset	116	7, 074	2	229	114	6, 845		
Bath	255	139, 856	27	4, 165	216	125, 637	12	10, 054
Portland and Falmouth	303	79, 865	36	10, 571	267	69, 294		
Saco	16	1, 277	2	198	14	1, 079		
Kennebunk	27	2, 981	1	26	26	2, 955		
York	9	335			9	335		
New Hampshire:								
Portsmouth	65	10, 149	9	418	56	9, 731		
Massachusetts	1, 887	433, 133	166	77, 055	1, 695	337, 101	26	18, 977
Newburyport	39	12, 642	12	784	25	11, 771	2	87
Gloucester	469	32, 828	8	311	460	32, 395	1	122
Salem and Beverly	44	4, 291	6	181	38	4, 110		
Marblehead	33	2, 966	2	57	31	2, 909		
Boston and Charlestown	667	265, 050	102	48, 326	551	201, 671	14	15, 053
Plymouth	20	1, 300	1	344	19	956		
Barnstable	282	24, 752	1	46	281	24, 706		
Nantucket	19	488			19	488		
Edgartown	31	935			31	935		
New Bedford	185	34, 817	13	3, 805	172	31, 012		
Fall River	98	53, 064	21	23, 201	68	26, 148	9	3, 715

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1888—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Rhode Island	246	36, 728	54	20, 534	189	15, 148	3	1, 046
Providence	108	28, 705	30	17, 900	75	9, 759	3	1, 046
Bristol and Warren	28	1, 415	4	135	24	1, 280	......	......
Newport	110	6, 608	20	2, 499	90	4, 109	......	......
Connecticut	812	119, 753	166	38, 732	483	54, 212	163	26, 809
Stonington	109	5, 482	7	1, 070	102	4, 412	......	......
New London	177	38, 131	40	17, 866	119	15, 058	18	5, 207
Hartford	82	12, 071	22	4, 123	40	3, 744	20	4, 204
New Haven	277	51, 613	53	9, 514	103	25, 271	121	16, 828
Fairfield	167	12, 456	44	6, 159	119	5, 727	4	570
New York	4, 050	908, 475	1, 100	372, 743	2, 329	409, 455	621	126, 277
New York	3, 806	895, 481	1, 074	369, 794	2, 112	400, 191	620	125, 496
Sag Harbor	244	12, 994	26	2, 949	217	9, 264	1	781
New Jersey	1, 141	91, 857	99	13, 048	979	58, 346	63	20, 463
Newark	68	6, 512	34	3, 755	34	2, 757	......	......
Perth Amboy	398	42, 190	42	7, 215	293	14, 512	63	20, 463
Little Egg Harbor	43	2, 993	......	......	43	2, 993	......	......
Great Egg Harbor	158	17, 780	7	553	151	17, 227	......	......
Bridgeton	438	19, 536	4	395	434	19, 141	......	......
Burlington	36	2, 846	12	1, 130	24	1, 716	......	......
Pennsylvania:								
Philadelphia	796	206, 908	264	74, 208	501	125, 316	31	7, 384
Delaware:								
Delaware	202	17, 616	30	4, 207	172	13, 409	......	......
Maryland	2, 167	141, 432,	162	55, 767	1, 988	82, 424	17	3, 241
Baltimore	1, 172	120, 100	158	55, 513	997	61, 346	17	3, 241
Annapolis	144	3, 115	......	......	144	3, 115	......	......
Eastern	851	18, 217	4	254	847	17, 963	......	......
District of Columbia:								
Georgetown	83	10, 974	36	8, 691	47	2. 283	......	......
Virginia	1, 307	41, 190	99	8, 137	1, 207	32, 982	1	71
Alexandria	72	4, 320	10	428	62	3, 892	......	......
Tappahannock	140	3, 804	5	304	134	3, 429	1	71
Richmond	66	6, 776	16	1, 304	50	5, 472	......	......
Petersburg	5	67	2	37	3	30	......	......
Yorktown	222	6, 517	3	785	219	5, 732	......	......
Norfolk and Portsmouth	444	13, 641	59	5, 021	385	8. 620	......	......
Cherrystone	358	6, 065	4	258	354	5, 807	......	......
North Carolina	370	13, 204	72	5, 187	298	8, 017	......	......
Albemarle	82	3, 143	31	2, 461	51	682	......	......
Pamlico	126	3, 294	21	1, 266	105	2, 028	......	......
Beaufort	109	1, 904	3	154	106	1, 750	......	......
Wilmington	53	4, 863	17	1, 306	36	3, 557	......	......
South Carolina	220	11, 472	57	6, 703	163	4, 769	......	......
Georgetown	24	2, 674	13	974	11	1, 700	......	......
Charleston	168	7, 719	33	5, 006	135	2, 713	......	......
Beaufort	28	1, 079	11	723	17	356	......	......
Georgia	135	31, 732	53	23, 633	80	6, 922	2	1, 177
Savannah	90	25, 217	34	21, 458	54	2, 582	2	1, 177
Brunswick	42	6, 163	18	2, 141	24	4, 022	......	......
St. Mary	3	352	1	34	2	318	......	......
Florida	528	32, 319	122	12, 282	406	20, 037	......	......
Fernandina	15	4, 042	1	67	14	3, 975	......	......
St. John	71	6, 943	47	5, 204	24	1, 739	......	......
St. Augustine	20	578	8	391	12	187	......	......
Key West	195	7, 155	22	3, 269	173	3, 886	......	......
St. Mark	42	1, 042	8	403	34	639	......	......
Apalachicola	42	3, 632	15	1, 633	27	1, 999	......	......
Pensacola	143	8, 927	21	1, 315	122	7, 612	......	......
Alabama:								
Mobile	129	10, 119	50	5, 712	70	3, 869	9	538
Mississippi:								
Pearl River	157	7, 549	7	684	150	6, 865	......	......

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1888—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Louisiana	435	42, 955	58	31, 062	377	11, 893		
New Orleans	325	39, 535	23	28, 865	302	10, 670		
Teche	110	3, 420	35	2, 197	75	1, 223		
Texas	229	9, 860	39	3, 430	181	5, 089	9	1, 341
Galveston	180	7, 958	32	2, 573	142	4, 404	6	981
Saluria	13	195			13	195		
Corpus Christi	26	763	2	158	22	382	2	223
Brazos de Santiago	7	382	3	274	4	108		
Paso del Norte	3	562	2	425			1	137

1889

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	17, 165	2, 555, 649	2, 829	798, 912	13, 336	1, 525, 315	1, 000	231, 422
Maine	2, 103	376, 010	123	24, 208	1, 968	341, 693	12	10, 109
Passamaquoddy	157	19, 356	13	4, 811	144	14, 545		
Machias	194	16, 620	5	109	189	16, 511		
Frenchman Bay	226	14, 763	12	721	214	14, 042		
Castine	252	13, 666	3	78	249	13, 588		
Bangor	148	23, 895	13	1, 102	134	22, 555	1	238
Belfast	148	25, 468	1	35	147	25, 433		
Waldoboro	316	50, 987	6	848	310	50, 139		
Wiscasset	97	6, 228	1	50	96	6, 178		
Bath	224	117, 415	30	5, 724	183	101, 820	11	9, 871
Portland and Falmouth	301	83, 699	36	10, 506	265	73, 193		
Saco	11	841	2	198	9	643		
Kennebunk	24	2, 864	1	26	23	2, 838		
York	5	208			5	208		
New Hampshire:								
Portsmouth	63	10, 057	8	400	55	9, 657		
Massachusetts	1, 828	411, 244	174	80, 527	1, 621	306, 749	33	23, 968
Newburyport	28	9, 091	9	468	17	8, 536	2	87
Gloucester	462	33, 714	8	311	453	33, 281	1	122
Salem and Beverly	36	2, 663	4	103	32	2, 560		
Marblehead	28	2, 194	3	72	25	2, 122		
Boston and Charlestown	675	257, 051	113	50, 533	542	186, 908	20	19, 610
Plymouth	19	1, 370	1	344	18	1, 026		
Barnstable	275	21, 617	2	114	273	21, 503		
Nantucket	20	435			20	435		
Edgartown	34	1, 325	1	16	33	1, 309		
New Bedford	162	31, 349	12	4, 123	150	27, 226		
Fall River	89	50, 435	21	24, 443	58	21, 843	10	4, 149
Rhode Island	253	39, 996	60	24, 489	190	14, 461	3	1, 046
Providence	108	31, 263	33	21, 627	72	8, 590	3	1, 046
Bristol and Warren	27	1. 312	5	171	22	1, 141		
Newport	118	7. 421	22	2, 691	96	4, 730		
Connecticut	796	119, 303	168	38, 076	457	52, 277	171	28, 950
Stonington	111	5, 206	8	736	102	3, 988	1	482
New London	172	38, 807	38	17, 629	114	15, 607	20	5, 571
Hartford	81	11, 313	20	3, 505	39	3, 465	22	4, 343
New Haven	268	56, 445	52	8, 510	92	23, 951	124	17, 984
Fairfield	164	13, 532	50	7, 696	110	5, 266	4	570
New York	4, 092	936, 508	1, 099	375, 626	2, 361	430, 645	632	130, 237
New York	3, 874	925, 015	1, 076	372, 896	2, 167	422, 664	631	129, 455
Sag Harbor	218	11, 493	23	2, 730	194	7, 981	1	782
New Jersey	1, 172	92, 623	104	13, 124	997	57, 547	71	21, 952
Newark	70	6, 380	36	3, 486	34	2, 894		
Perth Amboy	423	44, 331	46	7, 841	307	14, 688	70	21, 802
Little Egg Harbor	43	2, 731	1	52	42	2, 679		
Great Egg Harbor	169	18, 123	4	286	165	17, 837		
Bridgeton	429	18, 162	4	395	425	17, 767		
Burlington	38	2, 896	13	1, 064	24	1, 682	1	150
Pennsylvania:								
Philadelphia	800	203, 027	270	73, 195	484	118, 695	46	11, 137
Delaware:								
Delaware	195	19, 110	31	3, 968	164	15, 142		

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS 1880-1889—Continued.

1889—Continued.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Maryland	2, 195	136, 747	169	57, 665	2, 010	76, 744	16	2, 338
Baltimore	1, 163	114, 037	163	57, 221	990	55, 425	10	1, 391
Annapolis	154	3, 309	....	....	154	3, 309	....	....
Eastern	878	19, 401	6	444	866	18, 010	6	947
District of Columbia:								
Georgetown	108	11, 741	37	8, 745	71	2, 996	....	....
Virginia	1, 329	42, 798	116	10, 028	1, 212	32, 699	1	71
Alexandria	74	2, 069	11	495	63	1, 574	....	....
Tappahannock	145	3, 995	5	304	139	3, 620	1	71
Richmond	64	5, 095	17	1, 193	47	3, 902	....	....
Petersburg	5	67	2	37	3	30	....	....
Yorktown	213	6, 286	4	1, 195	209	5, 091	....	....
Norfolk and Portsmouth	466	18, 976	70	6, 098	396	12, 878	....	....
Cherrystone	362	6, 310	7	706	355	5, 604	....	....
North Carolina	398	12, 951	78	5, 539	320	7, 412	....	....
Albemarle	91	3, 321	33	2, 451	58	870	....	....
Pamlico	132	3, 385	23	1, 424	109	1, 961	....	....
Beaufort	124	2, 166	3	154	121	2, 012	....	....
Wilmington	51	4, 079	19	1, 510	32	2, 569	....	....
South Carolina	228	12, 148	59	6, 914	169	5, 234	....	....
Georgetown	24	2, 367	14	1, 017	10	1, 350	....	....
Charleston	174	8, 378	34	5, 222	140	3, 156	....	....
Beaufort	30	1, 403	11	675	19	728	....	....
Georgia	145	32, 344	61	25, 723	83	6, 612	1	9
Savannah	93	24, 188	34	22, 018	58	2, 161	1	9
Brunswick	49	8, 081	25	3, 653	24	4, 428	....	....
St. Mary	3	75	2	52	1	23	....	....
Florida	522	27, 618	122	9, 986	400	17, 632	....	....
Fernandina	14	3, 120	2	181	12	2, 939	....	....
St. John	72	5, 939	45	4, 085	27	1, 854	....	....
St. Augustine	23	447	8	194	15	253	....	....
Key West	155	4, 172	9	1, 667	146	2, 505	....	....
Tampa	37	929	12	693	25	236	....	....
St. Mark	34	715	8	372	26	343	....	....
Apalachicola	40	3, 015	15	1, 383	25	1, 632	....	....
Pensacola	147	9, 281	23	1, 411	124	7, 870	....	....
Alabama:								
Mobile	130	10, 312	47	4, 913	77	4, 986	6	413
Mississippi:								
Pearl River	170	11, 140	12	1, 872	158	9, 268	....	....
Louisiana	409	40, 695	49	30, 330	360	10, 365	....	....
New Orleans	308	37, 623	21	28, 454	287	9, 169	....	....
Teche	101	3, 072	28	1, 876	73	1, 196	....	....
Texas	229	9, 277	42	3, 584	179	4, 501	8	1, 192
Galveston	178	7, 361	35	2, 728	138	3, 800	5	833
Saluria	11	183	....	....	11	183	....	....
Corpus Christi	29	768	2	158	25	387	2	223
Brazos de Santiago	8	405	3	274	5	131	....	....
Paso del Norte	3	560	2	424	....	....	1	136

COMPARATIVE STATISTICS—Continued.

TABLE 29.—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880–1889 (ALL VESSELS)—NUMBER, AGGREGATE TONNAGE, AND AVERAGE TONNAGE OF ALL VESSELS REGISTERED IN THE CUSTOMS DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE 10 YEARS 1880–1889.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.
Total	17, 484	2, 657, 349	152	17, 589	2, 652, 319	151	17, 897	2, 714, 281	152	17, 856	2, 770, 017	155	17, 922	2, 819, 586	157
Maine	2, 643	508, 729	192	2, 561	504, 099	197	2, 590	525, 449	203	2, 608	533, 791	205	2, 578	543, 432	211
Passamaquoddy	197	23, 510	119	190	22, 383	118	190	21, 778	115	192	20, 291	106	187	19, 973	107
Machias	176	19, 355	110	155	14, 503	94	166	14, 400	87	181	16, 737	92	194	20, 952	108
Frenchman Bay	243	14, 849	61	243	15, 045	62	244	14, 532	60	250	14, 609	58	236	14, 704	62
Castine	319	19, 082	60	311	18, 870	61	292	16, 778	57	270	16, 195	60	252	14, 138	56
Bangor	174	26, 686	153	160	25, 368	159	168	26, 499	158	168	25, 659	153	182	27, 525	151
Belfast	236	47, 064	199	230	46, 024	200	237	49, 359	208	245	48, 465	198	252	51, 677	205
Waldoboro	421	84, 017	200	403	83, 915	208	409	91, 137	223	408	93, 709	230	372	84, 671	228
Wiscasset	164	9, 851	60	158	8, 722	55	149	8, 040	54	150	7, 684	51	150	7, 326	49
Bath	274	135, 976	496	272	140, 543	517	289	155, 477	538	296	165, 795	560	299	173, 749	581
Portland and Falmouth	369	118, 700	322	369	118, 235	320	374	116, 600	312	381	117, 120	307	387	119, 900	310
Saco	18	655	36	19	1, 559	82	21	1, 884	90	20	2, 320	116	17	2, 504	147
Kennebunk	43	8, 673	202	39	8, 559	219	39	8, 614	221	36	4, 864	135	38	5, 917	156
York	9	311	35	12	373	31	12	351	29	11	343	31	12	396	33
New Hampshire:															
Portsmouth	74	9, 688	131	74	9, 841	133	65	9, 045	139	66	9, 062	137	70	10, 574	151
Massachusetts	2, 299	430, 182	187	2, 235	415, 109	186	2, 252	429, 092	191	2, 232	442, 009	198	2, 156	437, 364	203
Newburyport	66	13, 188	200	64	12, 445	194	61	11, 637	191	70	18, 423	263	72	18, 910	263
Gloucester	476	28, 195	59	469	27, 302	58	478	27, 850	58	503	31, 342	62	496	31, 762	64
Salem and Beverly	68	6, 651	98	62	5, 409	87	64	5, 291	83	48	4, 060	85	41	1, 772	43
Marblehead	61	2, 419	40	53	1, 791	34	57	1, 963	34	48	2, 540	53	42	2, 777	66
Boston and Charlestown	808	264, 263	327	803	253, 551	316	835	266, 964	320	791	261, 424	330	789	261, 838	332
Plymouth	51	2, 963	58	47	2, 444	52	40	2, 071	52	45	2, 701	60	45	2, 408	54
Barnstable	340	30, 156	89	315	27, 817	88	322	30, 171	94	332	32, 736	99	312	30, 936	99
Nantucket	16	1, 306	82	16	1, 349	84	16	1, 312	82	17	1, 376	81	19	1, 537	81
Edgartown	24	1, 540	64	25	1, 906	76	23	1, 439	63	24	1, 362	57	26	1, 572	60
New Bedford	265	44, 838	169	256	43, 231	169	232	42, 187	182	233	41, 228	177	208	36, 979	178
Fall River	124	34, 663	280	125	37, 864	303	124	38, 207	308	121	44, 817	370	106	46, 873	442
Rhode Island	300	41, 106	137	302	38, 399	127	309	44, 240	143	282	42, 012	149	291	41, 499	143
Providence	125	34, 386	275	131	31, 727	242	144	37, 544	261	139	36, 226	261	142	34, 304	242
Bristol and Warren	31	1, 449	47	35	1, 828	52	36	2, 039	57	33	1, 224	37	34	1, 891	56
Newport	144	5, 271	37	136	4, 844	36	129	4, 657	36	110	4, 562	41	115	5. 304	46
Connecticut	822	82, 742	101	828	87, 142	105	866	96, 410	111	865	102, 975	119	861	109, 198	127
Stonington	124	7, 803	63	118	8, 263	70	110	8, 223	75	99	6, 455	65	103	6, 465	63
New London	200	22, 232	111	198	23, 552	119	185	25, 914	140	187	28, 726	154	192	32, 681	170
Middletown	106	14, 066	133	105	15, 404	147	104	14, 501	139	99	14, 585	147	97	14, 332	148
New Haven	226	28, 178	125	237	30, 304	128	291	38, 550	132	312	43, 535	140	297	45, 195	152
Fairfield	166	10, 463	63	170	9, 619	57	176	9, 222	52	168	9, 673	58	172	10, 525	61
New York	4, 009	934, 950	233	4, 095	934, 860	228	4, 101	945, 231	230	4, 120	943, 587	229	4, 236	978, 371	231
New York	3, 721	918, 057	247	3, 801	917, 651	241	3, 830	928, 658	242	3, 870	928, 333	240	3, 986	964, 556	242
Sag Harbor	288	16, 893	59	294	17, 209	59	271	16, 573	61	250	15, 254	61	250	13, 815	55
New Jersey	1, 087	87, 556	81	1, 126	96, 150	85	1, 194	101, 466	85	1, 193	99, 519	83	1, 103	91. 595	83
Newark	64	5, 316	83	58	4, 485	77	62	4, 981	80	70	6, 002	86	79	7, 369	93
Perth Amboy	435	36, 722	84	457	43, 510	95	517	48, 648	94	505	47, 991	95	385	36, 706	95
Little Egg Harbor	72	5, 583	78	67	5, 237	78	66	4, 867	74	65	4, 652	72	60	4, 396	73
Great Egg Harbor	127	14, 859	117	135	16, 548	123	139	16, 652	120	127	14, 530	114	135	17, 619	131
Bridgeton	314	16, 153	51	338	17, 694	52	340	17, 759	52	354	17. 714	50	378	17, 979	48
Burlington	75	8, 923	119	71	8, 676	122	70	8, 559	122	72	8. 630	120	66	7, 526	114
Pennsylvania:															
Philadelphia	941	209, 112	222	936	209, 568	224	895	205, 663	230	900	221, 508	246	894	218, 947	245
Delaware:															
Delaware	182	16, 287	89	176	16, 090	91	165	16, 669	101	177	17, 678	100	182	19. 939	110
Maryland	1, 788	121, 021	68	1, 840	118, 981	65	1, 922	125, 176	65	1, 981	129, 048	65	2, 168	138, 871	64
Baltimore	1, 013	102, 139	101	1, 046	99, 739	95	1, 090	104, 475	96	1, 106	107, 113	97	1, 188	115, 470	97
Annapolis	118	2, 262	19	120	2, 273	19	120	2, 273	19	122	2, 548	21	162	3, 249	20
Eastern	657	16, 620	25	674	16, 969	25	712	18, 428	26	753	19, 387	26	818	20, 152	25
District of Columbia:															
Georgetown	91	8, 771	96	88	9, 236	105	87	10, 568	121	84	10, 746	128	82	10. 968	134

COMPARATIVE STATISTICS—Continued.

TABLE 29.—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880–1889 (ALL VESSELS)—Continued.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Virginia	1,150	33,555	29	1,190	33,343	28	1,261	37,311	30	1,230	38,285	31	1,189	41,305	35
Alexandria	99	3,945	40	100	3,628	36	87	3,654	42	84	3,525	42	88	5,952	68
Tappahannock	102	2,669	26	130	3,107	24	140	3,230	23	120	3,137	26	130	3,243	25
Yorktown	142	2,436	17	135	1,994	15	131	2,103	16	202	3,256	16	219	4,058	19
Richmond	39	4,657	119	57	5,955	104	59	6,468	110	64	7,385	115	65	7,908	122
Petersburg	3	47	16	4	264	66	4	278	70	5	175	35	5	217	43
Norfolk and Portsmouth	407	14,521	36	426	13,326	31	478	16,041	34	410	15,447	38	397	15,335	39
Cherrystone	358	5,280	15	338	5,069	15	362	5,537	15	345	5,360	16	285	4,592	16
North Carolina	330	12,669	38	347	15,765	45	336	13,340	40	340	14,875	44	353	17,096	48
Albemarle	76	2,773	36	79	3,093	39	74	2,860	39	64	2,746	43	67	2,786	42
Pamlico	106	2,629	25	114	2,700	24	118	3,033	26	125	3,454	28	118	3,227	27
Beaufort	70	1,096	16	65	1,059	16	67	1,158	17	73	1,247	17	86	1,614	19
Wilmington	78	6,171	79	89	8,913	100	77	6,289	82	78	7,428	95	82	9,469	115
South Carolina	223	11,482	51	222	11,737	53	228	10,696	47	219	13,457	61	221	12,043	54
Georgetown	19	1,002	53	11	595	54	17	1,164	68	18	2,217	123	21	2,381	113
Charleston	182	9,712	53	188	10,057	53	189	8,572	45	175	9,387	54	177	8,192	46
Beaufort	22	768	35	23	1,085	47	22	960	44	26	1,853	71	23	1,470	64
Georgia	119	21,118	177	131	26,427	202	120	26,684	222	120	34,560	288	131	39,250	300
Savannah	72	14,310	199	81	19,409	240	76	20,732	273	79	25,756	326	77	27,777	361
Brunswick	40	5,286	132	47	6,896	147	40	5,442	136	37	8,648	234	50	10,832	217
St. Mary	7	1,522	217	3	122	41	4	510	128	4	156	39	4	641	160
Florida	395	33,761	85	385	28,981	75	419	30,161	72	442	34,055	77	407	30,869	76
Fernandina	18	4,938	274	20	4,316	216	19	3,853	203	16	3,167	198	17	3,725	219
St. John	47	4,561	97	48	3,966	83	59	5,259	89	59	5,442	92	12	522	44
St. Augustine	2	60	30	3	73	24	4	67	17	4	257	64	6	301	50
Key West	152	7,082	47	143	5,610	39	153	6,462	42	154	6,864	45	151	5,997	40
St. Mark	30	2,327	78	20	1,598	80	42	3,042	72	45	3,179	71	46	1,494	32
Apalachicola	32	2,504	78	31	1,412	46	35	2,452	70	34	3,037	89	30	2,178	73
Pensacola	114	12,289	108	120	12,006	100	107	9,026	84	130	12,109	93	145	16,652	115
Alabama:															
Mobile	121	15,291	126	130	16,272	125	149	16,611	111	154	13,676	89	131	10,535	80
Mississippi:															
Pearl River	149	4,966	33	159	6,527	41	158	6,110	39	135	6,099	45	131	5,216	40
Louisiana	497	61,625	124	489	58,377	119	503	52,895	105	434	52,403	121	471	51,712	110
New Orleans	396	57,848	146	399	55,085	138	411	49,941	122	350	49,457	141	368	48,194	131
Teche	101	3,777	37	90	3,292	37	92	2,954	32	84	2,946	35	103	3,518	34
Texas	264	12,738	48	275	15,415	56	277	11,464	41	274	10,672	39	267	10,802	40
Galveston	184	9,780	53	195	12,465	64	191	8,102	42	197	8,313	42	186	8,144	44
Saluria	37	838	23	31	772	25	29	732	25	27	696	26	29	548	19
Corpus Christi	28	898	32	34	1,241	37	43	1,908	44	38	972	26	36	1,134	32
Brazos de Santiago	15	1,222	81	15	937	62	14	722	52	12	691	58	16	976	61
Paso del Norte	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......

COMPARATIVE STATISTICS—Continued.

TABLE **29.**—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.
Total	17, 771	2, 781, 791	157	17, 362	2, 659. 448	153	17, 029	2, 595, 307	152	17, 180	2, 587, 089	151	17, 165	2, 555, 649	149
Maine	2, 477	487, 574	197	2, 391	459, 139	192	2, 247	416, 381	185	2, 221	409, 664	184	2, 103	376, 010	179
Passamaquoddy	180	18, 830	105	173	18, 252	106	161	17, 802	111	173	19, 947	115	157	19, 356	123
Machias	196	19, 198	98	185	17, 886	97	181	16, 606	92	190	16, 389	86	194	16, 620	86
Frenchman Bay	227	13, 920	61	241	16, 003	66	230	13, 743	60	232	14, 506	63	226	14, 763	65
Castine	251	14, 483	58	234	13, 079	56	233	12, 768	55	242	13, 612	56	252	13, 666	54
Bangor	167	23, 680	142	161	21, 435	133	157	21, 587	137	144	21, 281	148	148	23, 895	161
Belfast	255	47, 748	187	232	41, 355	178	187	33, 491	179	170	31, 321	184	148	25, 468	172
Waldoboro	349	76, 588	219	339	70, 372	208	341	70, 416	206	344	61, 220	178	316	50, 987	161
Wiscasset	150	7, 211	48	141	7, 617	54	130	8, 317	64	116	7, 074	61	97	6, 228	64
Bath	260	145, 374	559	259	141, 913	548	248	132, 080	533	255	139, 856	548	224	117, 415	524
Portland and Falmouth	379	114, 387	302	365	105, 306	289	323	84, 514	262	303	79, 865	264	301	83, 699	278
Saco	19	2, 383	125	19	2, 191	115	17	1, 597	94	16	1, 277	80	11	841	76
Kennebunk	31	3, 357	108	32	3, 400	106	30	3, 157	105	27	2. 981	110	24	2, 864	119
York	13	415	32	10	330	33	9	303	34	9	335	37	5	208	42
New Hampshire: Portsmouth	66	10, 891	165	65	10, 422	160	65	10, 436	161	65	10, 149	156	63	10, 057	160
Massachusetts	2, 068	442, 837	214	2, 011	435, 969	217	1, 887	420, 897	223	1, 887	433, 133	230	1, 828	411, 244	225
Newburyport	63	17, 162	272	64	16, 565	259	38	13, 153	346	39	12, 642	324	28	9, 091	325
Gloucester	510	33, 943	67	494	33, 228	67	479	32, 568	68	469	32, 828	70	462	33, 714	73
Salem and Beverly	38	1, 952	51	39	2, 319	59	51	4, 757	93	44	4, 291	98	36	2, 663	74
Marblehead	44	3, 036	69	40	2, 866	72	35	2, 353	67	33	2, 966	90	28	2, 194	78
Boston and Charlestown	723	267, 805	370	699	262, 487	376	628	249, 864	398	667	265, 050	397	675	257, 051	381
Plymouth	35	2, 038	58	31	1, 700	55	25	1, 553	62	20	1, 300	65	19	1, 370	72
Barnstable	305	29, 609	97	307	28, 908	94	297	27, 881	94	282	24, 752	88	275	21, 617	79
Nantucket	19	1, 472	77	16	1, 041	65	15	458	31	19	488	26	20	435	22
Edgartown	23	1, 235	54	20	981	49	20	986	49	31	935	30	34	1, 325	39
New Bedford	209	36, 446	174	202	35, 928	178	198	36, 379	184	185	34, 817	188	162	31, 349	194
Fall River	99	48, 139	486	99	49, 946	505	101	50, 945	504	98	53, 064	541	89	50, 435	567
Rhode Island	270	39, 786	147	265	39, 111	148	242	36, 906	153	246	36, 728	149	253	39, 996	158
Providence	127	32, 881	259	131	32, 289	246	109	29, 493	271	108	28, 705	266	108	31, 263	289
Bristol and Warren	31	1, 511	49	30	1, 454	48	27	1, 368	51	28	1, 415	51	27	1, 312	49
Newport	112	5, 394	48	104	5, 368	52	106	6, 045	57	110	6, 608	60	118	7, 421	63
Connecticut	833	108, 420	130	818	109, 659	134	682	95. 902	141	812	119, 753	147	796	119, 303	150
Stonington	109	6, 669	61	105	6, 448	61	106	5, 512	52	109	5, 482	50	111	5, 204	47
New London	176	31, 881	181	172	32, 468	189	178	36, 034	202	177	38, 131	215	172	38, 807	226
Middletown	94	14, 115	150	95	14, 088	148	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hartford	.....	.....	.....	.....	.....	.....	85	12, 623	149	82	12, 071	147	81	11, 313	140
New Haven	284	44, 491	157	275	45, 331	165	146	30, 266	207	277	51, 613	186	268	50, 445	188
Fairfield	170	11, 264	66	171	11, 324	66	167	11, 467	69	167	12, 456	75	164	13, 532	83
New York	4, 171	986, 145	236	3, 988	912, 396	229	4, 033	928, 226	230	4, 050	908, 475	224	4, 092	936, 508	229
New York	3, 930	971, 485	247	3, 756	898, 475	239	3, 793	913, 575	241	3, 806	895, 481	235	3, 874	925, 015	239
Sag Harbor	241	14, 660	61	232	13, 921	60	240	14, 651	61	244	12, 994	53	218	11, 493	53
New Jersey	1, 077	89, 133	83	1, 107	87, 738	79	1, 098	89, 378	81	1, 141	91, 857	81	1, 172	92, 623	79
Newark	66	5, 349	81	71	6, 768	95	73	6, 666	91	68	6, 512	96	70	6, 380	91
Perth Amboy	374	36, 709	98	376	36, 197	96	375	38, 973	104	398	42, 190	106	423	44, 331	105
Little Egg Harbor	62	4, 477	72	53	4, 127	78	48	3, 947	82	43	2, 993	70	43	2, 731	64
Great Egg Harbor	133	17, 904	135	133	16, 788	126	139	17, 324	125	158	17, 780	113	169	18, 123	107
Bridgeton	399	21, 087	53	431	20, 280	47	427	19, 710	46	438	19, 536	45	429	18, 162	42
Burlington	43	3, 607	84	43	3, 578	83	36	2, 758	77	36	2, 846	79	38	2, 896	76
Pennsylvania: Philadelphia	842	216, 435	257	825	225, 300	273	827	215, 450	261	796	206, 908	260	800	203, 027	254
Delaware: Delaware	186	19, 946	107	175	16, 731	96	188	16, 382	87	202	17, 616	87	195	19, 110	98
Maryland	2, 280	146, 839	64	2, 233	144, 882	65	2, 227	140, 683	63	2, 167	141, 432	65	2, 195	136, 747	62
Baltimore	1, 262	123, 493	98	1, 232	122, 329	99	1, 200	118, 192	98	1, 172	120, 100	102	1, 163	114, 037	98
Annapolis	160	3, 174	20	130	2, 938	23	149	3, 215	22	144	3, 115	22	154	3, 309	21
Eastern	858	20, 172	24	871	19, 615	23	878	19, 276	22	851	18, 217	21	878	19, 401	22
District of Columbia: Georgetown	72	10, 187	141	67	10, 081	150	77	11, 097	144	83	10, 974	132	108	11, 741	109

COMPARATIVE STATISTICS—Continued.

TABLE 29.—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Virginia	1,236	45,788	37	1,264	42,257	33	1,289	44,520	35	1,307	41,190	32	1.329	42,798	32
Alexandria	84	5,582	66	76	4,904	65	66	3,568	54	72	4,320	60	74	2,069	28
Tappahannock	148	4,016	27	146	4,053	28	145	3,912	27	140	3,804	27	145	3,995	28
Yorktown	214	3,730	17	213	4,289	20	224	7,534	34	222	6,517	29	213	6,286	30
Richmond	63	10,017	159	58	6,641	115	62	6,043	97	66	6,776	103	64	5,095	80
Petersburg	[illegible]	229	38	8	255	32	6	195	33	5	67	13	5	67	13
Norfolk and Portsmouth	408	17,017	42	425	16,377	39	438	17,376	40	444	13,641	31	466	18,976	41
Cherrystone	313	5,197	17	338	5,738	17	348	5,892	17	358	6,065	17	362	6,310	17
North Carolina	350	14,906	43	331	12,690	38	348	12,739	37	370	13,204	36	398	12,951	33
Albemarle	70	2,794	40	71	2,883	41	77	2,998	39	82	3,143	38	91	3,321	36
Pamlico	118	2,885	24	114	2,847	25	118	3,103	26	126	3,294	26	132	3,385	26
Beaufort	87	1,631	19	87	1,597	18	101	1,845	18	109	1,904	17	124	2,166	17
Wilmington	75	7,596	101	59	5,363	91	52	4,793	92	53	4,863	92	51	4,079	80
South Carolina	227	12,807	56	206	11,625	56	216	12,537	58	220	11,472	52	228	12,148	53
Georgetown	23	2,679	116	22	1,939	88	21	2,063	98	24	2,674	111	24	2,367	99
Charleston	183	9,419	51	160	8,237	51	174	9,522	55	168	7,719	46	174	8,378	48
Beaufort	21	709	34	24	1,449	60	21	952	45	28	1,079	39	30	1,403	47
Georgia	133	35,831	269	131	32,463	248	135	32,551	241	135	31,732	235	145	32,344	223
Savannah	88	27,161	309	90	25,580	284	89	23,806	267	90	25,217	280	93	24,188	260
Brunswick	42	8,091	193	37	5,966	161	43	8,166	190	42	6,163	147	49	8,081	165
St. Mary	3	579	193	4	917	229	3	579	193	3	352	117	3	75	25
Florida	489	39,488	81	491	33,711	69	505	37,388	74	528	32,319	61	522	27,618	53
Fernandina	17	3,591	211	15	3,309	221	14	3,586	256	15	4,042	269	14	3,120	223
St. John	74	6,358	86	75	6,193	83	60	7,309	122	71	6,943	98	72	5,939	82
St. Augustine	8	332	42	8	332	42	11	405	37	20	578	29	23	447	19
Key West	154	7,402	48	173	7,851	45	186	7,123	38	195	7,155	37	155	4,172	27
St. Mark	53	1,582	30	48	1,125	23	47	1,370	29	42	1,042	25	34	715	21
Apalachicola	37	1,677	45	39	1,852	47	40	3,653	91	42	3,632	86	40	3,015	75
Pensacola	146	18,546	127	133	13,049	98	147	13,942	95	143	8,927	62	147	9,281	63
Tampa	...	...	...	...	...	...	...	...	...	...	...	...	37	929	25
Alabama:															
Mobile	142	10.958	77	132	10,983	83	125	9,824	79	129	10,119	78	130	10,312	79
Mississippi:															
Pearl River	129	5,396	42	151	5,953	39	156	9,511	61	157	7,549	48	170	11,140	66
Louisiana	471	49.804	106	453	45,680	101	444	43,024	97	435	42,955	99	409	40,695	99
New Orleans	371	46.604	126	352	42,981	122	337	40,242	119	325	39,535	122	308	37,623	122
Teche	100	3,200	32	101	2,699	27	107	2,782	26	110	3,420	31	101	3,072	30
Texas	252	8,620	34	258	12,658	49	238	11,475	48	229	9,860	43	229	9,277	41
Galveston	180	6,804	38	190	10,604	56	184	9,196	50	180	7,958	44	178	7,361	41
Saluria	26	346	13	23	303	13	15	212	14	13	195	15	11	183	17
Corpus Christi	33	998	30	33	1,302	39	28	1,224	44	26	763	29	29	768	26
Brazos de Santiago	13	472	36	12	449	37	9	418	46	7	382	55	8	405	51
Paso del Norte	...	...	...	...	...	...	2	425	213	3	562	187	3	560	187

COMPARATIVE STATISTICS—Continued.

TABLE 30.—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880-1889 (STEAMERS)—NUMBER, AGGREGATE TONNAGE, AND AVERAGE TONNAGE OF ALL STEAMERS REGISTERED IN THE CUSTOMS DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE 10 YEARS 1880-1889.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.
Total	2, 251	631, 302	280	2, 364	644, 204	273	2, 532	692, 959	274	2, 584	730, 308	283	2, 693	755, 754	281
Maine	85	16, 975	200	88	16, 471	187	93	16, 657	179	101	18, 954	188	114	22, 965	201
Passamaquoddy	11	4, 707	428	11	4, 707	428	14	3, 975	284	13	3, 216	247	16	4, 416	276
Machias	4	165	41	4	89	22	4	75	19	5	90	18	7	160	23
Frenchman Bay	1	32	32	2	45	23	4	75	19	6	110	18	5	125	25
Castine	1	25	25	1	25	25				1	25	25	1	25	25
Bangor	7	557	80	8	539	67	8	404	51	9	717	80	12	806	67
Belfast	2	97	49	2	97	49	3	146	49	4	157	39	4	157	39
Waldoboro	9	891	99	8	1, 008	126	5	815	163	4	793	198	4	1, 138	285
Wiscasset	3	138	46	3	138	46	2	84	42	2	84	42			
Bath	22	3, 057	139	25	3, 019	121	27	3, 138	116	28	4, 634	166	32	4, 400	138
Portland and Falmouth	23	7, 201	313	22	6, 699	305	23	7, 685	334	25	8, 825	353	30	11, 507	384
Saco	2	105	53	2	105	53	3	260	87	4	303	76	3	231	77
Kennebunk															
New Hampshire:															
Portsmouth	5	206	41	7	249	36	7	254	36	8	413	52	7	378	54
Massachusetts	152	48, 687	320	146	46, 603	319	160	50, 921	318	177	64, 309	363	188	60, 626	322
Newburyport	13	773	59	16	775	48	15	741	49	15	906	60	16	916	57
Gloucester	4	73	18	6	120	20	5	165	33	6	180	30	1	69	69
Salem and Beverly	4	811	203	1	14	14	3	44	15	3	43	14	3	31	10
Marblehead				1	16	16	1	16	16						
Boston and Charlestown	89	26, 381	296	88	25, 913	294	102	29, 842	293	114	36, 694	322	132	34, 382	260
Plymouth	2	464	232	1	325	325	1	159	159	1	344	344			
Barnstable	1	90	90							1	7	7			
Nantucket	4	1, 080	270	3	1, 070	357	3	1, 069	356	2	1, 062	531	2	1, 062	531
Edgartown				1	11	11									
New Bedford	15	2, 963	198	11	2, 308	210	12	2, 727	227	13	2, 786	214	12	2, 320	193
Fall River	20	16, 052	803	18	16, 051	892	18	16, 158	898	22	22, 287	1, 013	22	21, 846	993
Rhode Island	59	24, 518	416	54	21, 351	395	54	24, 340	451	49	23, 707	484	59	21, 687	368
Providence	30	22, 274	742	27	19, 491	722	29	22, 440	774	30	21, 800	727	37	19, 889	538
Newport	21	1, 968	94	17	1, 656	97	16	1, 613	101	13	1. 722	132	15	1, 580	105
Bristol and Warren	8	276	35	10	204	20	9	287	32	6	185	31	7	218	31
Connecticut	108	30, 047	278	108	30, 379	281	117	32, 066	274	135	34, 203	253	152	35, 617	234
Stonington	9	1, 163	129	9	1, 187	132	11	1, 329	121	12	1, 326	111	12	1, 376	115
New London	37	13, 334	360	37	13, 607	368	36	15, 912	442	41	16, 425	401	46	16, 516	359
Middletown	25	5, 917	237	21	5, 668	270	19	4, 325	228	19	4, 445	234	19	4, 269	225
New Haven	25	6, 462	258	28	6, 742	241	33	7, 048	214	42	7, 731	184	47	8, 499	181
Fairfield	12	3, 171	264	13	3, 175	244	18	3, 452	192	21	4, 276	204	28	4, 957	177
New York	850	292, 629	344	925	305, 741	331	987	327, 974	332	1, 006	338, 604	337	1, 072	363, 751	339
New York	824	290, 674	353	894	303, 394	339	954	325, 427	341	978	336, 327	344	1, 044	361, 439	346
Sag Harbor	26	1, 955	75	31	2, 347	76	33	2, 547	77	28	2, 277	81	28	2, 312	83
New Jersey	113	17, 743	157	123	18, 751	152	135	20, 237	150	127	17, 982	142	110	16, 423	149
Newark	27	2, 808	104	30	2, 977	99	35	3, 450	99	32	3, 358	105	35	3, 510	100
Perth Amboy	62	10, 212	165	68	11, 172	164	73	12, 048	165	66	9, 840	149	48	8, 178	170
Little Egg Harbor	1	167	167	1	167	167	2	215	108	2	55	28	1	48	48
Great Egg Harbor	2	36	18	4	65	16	3	48	16	3	182	61	2	170	85
Bridgeton	3	149	50	3	149	50	3	149	50	4	181	45	5	261	52
Burlington	18	4, 371	243	17	4, 221	248	19	4, 327	228	20	4, 366	218	19	4. 256	224
Pennsylvania:															
Philadelphia	269	72, 201	268	269	70, 337	261	279	75, 268	270	289	79, 022	273	289	74, 116	256
Delaware:															
Delaware	21	4, 042	192	23	4, 140	180	19	3, 769	198	21	3, 934	187	25	6, 291	252
Maryland	139	38, 742	279	142	38, 478	271	153	47, 626	311	154	47, 371	308	174	50, 497	290
Baltimore	138	38, 723	281	141	38, 459	273	150	47, 318	315	151	47, 024	311	172	50, 391	293
Annapolis										1	45	45			
Eastern	1	19	19	1	19	19	3	308	103	2	302	151	2	106	53
District of Columbia:															
Georgetown	33	6, 851	208	38	7, 668	202	38	8, 278	218	35	8, 406	240	31	7, 902	255

COMPARATIVE STATISTICS—Continued.

TABLE 30.—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880-1889 (STEAMERS)—Continued.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.
Virginia	86	6,716	78	96	7,896	82	107	8,545	80	104	8,398	81	111	8,747	79
Alexandria	12	754	63	12	756	63	12	699	58	12	481	40	14	566	40
Tappahannock	2	251	126	4	356	89	5	279	56	3	170	57	2	92	46
Yorktown	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	57	57	3	178	59
Richmond	16	986	62	18	2,031	113	20	2,062	103	19	2,014	106	20	2,091	105
Petersburg	2	31	16	3	74	25	1	16	16	4	162	41	4	210	53
Norfolk and Portsmouth	54	4,694	87	59	4,679	79	67	5,470	82	63	5,495	87	66	5,591	85
Cherrystone	.....	.....	.....	.....	.....	.....	2	19	10	2	19	10	2	19	10
North Carolina	41	3,511	86	49	4,034	82	56	4,686	84	55	4,788	87	63	5,341	85
Albemarle	21	1,835	87	28	2,139	76	27	1,999	74	25	2,129	85	25	2,140	86
Pamlico	6	384	64	7	457	65	12	861	72	14	932	67	17	1,123	66
Beaufort	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	33	33	2	152	76
Wilmington	14	1,292	92	14	1,438	103	17	1,826	107	15	1,694	113	19	1,926	101
South Carolina	49	6,414	131	44	6,496	148	46	4,993	109	45	6,259	139	50	6,550	131
Georgetown	14	613	44	8	220	28	10	422	42	9	706	78	11	834	76
Charleston	31	5,586	180	32	6,080	190	31	4,258	137	31	5,240	169	33	5,307	161
Beaufort	4	215	54	4	196	49	5	313	63	5	313	63	6	409	68
Georgia	33	11,764	356	36	16,029	445	38	16,708	440	42	21,525	513	44	23,246	528
Savannah	18	10,504	584	20	14,542	727	22	15,826	719	31	20,685	667	31	22,279	719
Brunswick	12	966	81	14	1,372	98	14	767	55	8	691	86	12	933	78
St. Mary	3	294	98	2	115	58	2	115	58	3	149	50	1	34	34
Florida	72	8,429	117	75	8,351	111	86	9,986	116	87	9,878	114	52	7,951	153
Fernandina	1	24	24	3	408	136	2	322	161	2	322	161	2	355	178
St. John	29	2,140	74	29	2,024	70	37	2,855	77	39	2,551	65	.....	.....	.....
St. Augustine	1	27	27	1	27	27	.....	.....	.....	.....	.....	.....	.....	.....	.....
Key West	11	3,243	295	9	2,222	247	11	2,962	269	12	3,495	291	12	3,317	276
St. Mark	7	601	86	7	412	59	8	423	53	5	203	41	8	563	70
Apalachicola	7	1,239	177	6	1,157	193	9	1,242	138	10	1,603	160	11	1,400	127
Pensacola	16	1,155	72	20	2,101	105	19	2,182	115	19	1,704	90	19	2,316	122
Alabama:															
Mobile	44	7,005	159	46	6,585	143	51	7,209	141	45	5,781	128	41	5,600	137
Mississippi:															
Pearl River	12	816	68	10	656	66	18	1,102	61	14	912	65	12	919	77
Louisiana	48	29,567	616	47	29,320	624	51	28,631	561	54	32,554	603	60	33,517	559
New Orleans	21	27,920	1,330	21	27,920	1,330	24	27,442	1,143	26	30,984	1,192	27	31,688	1,174
Teche	27	1,647	61	26	1,400	54	27	1,189	44	28	1,570	56	33	1,829	55
Texas	32	4,439	139	38	4,669	123	37	3,709	100	36	3,308	92	39	3.630	93
Galveston	28	3,444	123	34	4,013	118	33	3,149	95	31	2,7 2	87	33	2,954	90
Corpus Christi	.....	.....	.....	.....	.....	.....	1	112	112	2	158	79	2	158	79
Brazos de Santiago	4	995	249	4	656	164	3	448	149	3	448	149	4	518	130
Paso del Norte	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

COMPARATIVE STATISTICS—Continued.

TABLE 30.—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880–1889 (STEAMERS)—Continued.

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Total	2,671	773,444	290	2,662	763,302	287	2,680	773,823	289	2,763	785,164	284	2,829	798,912	282
Maine	119	22,242	187	116	22,043	190	112	19,938	178	120	22,931	191	123	24,208	197
Passamaquoddy	18	4,169	232	11	3,510	319	13	4,647	357	14	5,040	360	13	4,811	370
Machias	5	102	20	5	123	25	4	89	22	5	106	21	5	109	22
Frenchman Bay	6	218	36	7	494	71	8	521	65	13	740	57	12	721	60
Castine	1	25	25	3	55	18	2	30	15	2	30	15	3	78	26
Bangor	12	789	66	12	842	70	11	726	66	10	736	74	13	1,102	85
Belfast	4	157	39	2	92	46	2	67	34	2	84	42	1	35	35
Waldoboro	4	1,138	285	4	793	198	5	819	164	6	1,006	168	6	848	141
Wiscasset	2	106	53	2	106	53	1	50	50	2	229	115	1	50	50
Bath	28	3,530	126	27	3,502	130	26	3,470	133	27	4,165	154	30	5,724	191
Portland and Falmouth	36	11,777	327	39	12,280	315	37	9,306	252	36	10,571	294	36	10,506	292
Saco	3	231	77	3	231	77	2	198	99	2	198	99	2	198	99
Kennebunk	......	......	......	1	15	15	1	15	15	1	26	26	1	26	26
New Hampshire:															
Portsmouth	7	389	56	7	389	56	7	389	56	9	418	46	8	400	50
Massachusetts	156	68,941	442	166	70,424	424	154	70,964	461	166	77,055	464	174	80,527	463
Newburyport	15	906	60	14	893	64	11	801	73	12	784	65	9	468	52
Gloucester	6	209	35	8	273	34	7	246	35	8	311	39	8	311	39
Salem and Beverly	2	39	20	5	170	34	6	182	30	6	181	30	4	103	26
Marblehead	2	73	37	1	11	11	2	49	25	2	57	29	3	72	24
Boston and Charlestown	96	42,170	439	101	43,465	430	92	43,014	468	102	48,326	474	113	50,533	447
Plymouth	1	344	344	1	344	344	1	344	344	1	344	344	1	344	344
Barnstable	......	......	......	1	46	46	1	46	46	1	46	46	2	114	57
Nantucket	2	1,062	531	1	578	578	......	......	......	......	......	......	......	......	......
Edgartown	......	......	......	......	......	......	......	......	......	......	......	......	1	16	16
New Bedford	12	2,336	195	14	2,836	203	16	4,005	250	13	3,805	293	12	4,123	344
Fall River	20	21,802	1,090	20	21,808	1,090	18	22,277	1,238	21	23,201	1,105	21	24,443	1,164
Rhode Island	44	21,209	482	49	21,129	431	50	20,384	408	54	20,534	380	60	24,489	408
Providence	30	19,492	650	32	19,136	598	29	17,848	615	30	17,900	597	33	21,627	655
Newport	11	1,592	145	14	1,868	133	18	2,411	134	20	2,499	125	22	2,691	122
Bristol and Warren	3	125	42	3	125	42	3	125	42	4	135	34	5	171	34
Connecticut	148	36,565	247	153	36,400	238	156	37,475	240	166	38,732	233	168	38,076	227
Stonington	11	2,256	205	11	2,256	205	10	1,268	127	7	1,070	153	8	736	92
New London	38	16,221	427	36	16,106	447	37	17,567	475	40	17,866	447	38	17,629	464
Middletown	18	4,193	233	18	3,887	216	......	......	......	......	......	......	......	......	......
New Haven	48	8,565	178	48	8,544	178	48	8,706	181	53	9,514	180	52	8,510	164
Fairfield	33	5,330	162	40	5,607	140	40	5,972	149	44	6,159	140	50	7,696	154
Hartford	......	......	......	......	......	......	21	3,962	189	22	4,123	187	20	3,505	175
New York	1,054	366,487	348	1,057	357,364	338	1,077	371,270	345	1,100	372,743	339	1,099	375,626	342
New York	1,028	364,170	354	1,030	354,991	345	1,049	368,246	351	1,074	369,794	344	1,076	372,896	347
Sag Harbor	26	2,317	89	27	2,373	88	28	3,024	108	26	2,949	113	23	2,730	119
New Jersey	105	13,688	130	99	13,380	135	102	13,614	133	99	13,048	132	104	13,124	126
Newark	35	3,303	94	34	3,634	107	34	3,761	111	34	3,755	110	36	3,486	97
Perth Amboy	44	7,767	177	40	7,298	182	42	7,302	174	42	7,215	172	46	7,841	170
Little Egg Harbor	3	183	61	3	177	59	1	42	42	......	......	......	1	52	52
Great Egg Harbor	4	446	112	6	461	77	7	537	77	7	553	79	4	286	72
Bridgeton	7	828	118	5	679	136	6	809	135	4	395	99	4	395	99
Burlington	12	1,161	97	11	1,131	103	12	1,163	97	12	1,130	94	13	1,064	82
Pennsylvania:															
Philadelphia	277	77,414	279	266	74,837	281	269	77,070	287	264	74,208	281	270	73,195	271
Delaware:															
Delaware	26	5,099	196	26	4,061	156	27	3,547	131	30	4,207	140	31	3,968	128
Maryland	173	53,370	308	170	54,434	320	162	53,828	332	162	55,767	344	169	57,665	341
Baltimore	170	53,195	313	165	54,120	328	157	53,468	341	158	55,513	351	163	57,221	351
Annapolis	1	106	106	1	106	106	1	106	106	......	......	......	......	......	......
Eastern	2	69	35	4	208	52	4	254	64	4	254	64	6	444	74
District of Columbia:															
Georgetown	30	8,580	286	31	8,636	279	34	9,054	266	36	8,691	241	37	8,745	236

COMPARATIVE STATISTICS—Continued.

TABLE 30.—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880-1889 (STEAMERS)—Continued.

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Virginia	101	8,346	83	97	7,815	81	99	8,270	84	99	8,137	82	116	10,028	86
Alexandria	14	622	44	10	447	45	10	428	43	10	428	43	11	495	45
Tappahannock	3	170	57	3	170	57	5	304	61	5	304	61	5	304	61
Yorktown	3	148	49	4	820	205	4	812	203	3	785	262	4	1,195	299
Richmond	15	1,982	132	16	1,027	64	15	1,198	80	16	1,304	82	17	1,193	70
Petersburg	4	210	53	4	210	53	3	165	55	2	37	19	2	37	19
Norfolk and Portsmouth	58	4,997	86	58	5,005	86	59	5,167	88	59	5,021	85	70	6,098	87
Cherrystone	4	217	54	2	136	68	3	196	65	4	258	65	7	706	101
North Carolina	62	4,739	76	58	4,415	76	63	4,630	73	72	5,187	72	78	5,539	71
Albemarle	26	2,194	84	27	2,305	85	27	2,302	85	31	2,461	79	33	2,451	74
Pamlico	16	912	57	16	919	57	19	1,187	62	21	1,266	60	23	1,424	62
Beaufort	4	197	49	2	99	50	2	100	50	3	154	51	3	154	51
Wilmington	16	1,436	90	13	1,092	84	15	1,041	69	17	1,306	77	19	1,510	79
South Carolina	52	6,762	130	49	6,229	127	56	6,677	119	57	6,703	118	59	6,914	117
Georgetown	12	853	71	14	972	69	12	860	72	13	974	75	14	1,017	73
Charleston	34	5,500	162	26	4,637	178	33	5,074	154	33	5,006	152	34	5,222	154
Beaufort	6	409	68	9	620	69	11	743	68	11	723	66	11	675	61
Georgia	51	24,024	471	49	23,827	486	50	23,403	468	53	23,633	446	61	25,723	422
Savannah	36	22,652	629	34	22,455	660	32	21,687	678	34	21,458	631	34	22,018	648
Brunswick	14	1,338	96	14	1,338	96	17	1,682	99	18	2,141	119	25	3,653	146
St. Mary	1	34	34	1	34	34	1	34	34	1	34	34	2	52	26
Florida	110	11,568	105	115	12,430	108	108	12,239	113	122	12,282	101	122	9,986	82
Fernandina	3	389	130	3	389	130	1	67	67	1	67	67	2	181	91
St. John	50	3,574	71	52	4,258	82	41	4,812	117	47	5,204	111	45	4,085	91
St. Augustine	3	276	92	3	276	92	3	272	91	8	391	49	8	194	24
Key West	15	3,658	244	17	4,005	236	19	3,553	187	22	3,269	149	9	1,667	185
St. Mark	9	919	102	10	722	72	10	734	73	8	403	50	8	372	47
Apalachicola	12	1,309	109	11	1,242	113	12	1,389	116	15	1,633	109	15	1,383	92
Pensacola	18	1,443	80	19	1,538	81	22	1,412	64	21	1,315	63	23	1,411	61
Tampa	......	......	......	......	......	......	......	......	......	......	......	......	12	693	58
Alabama:															
Mobile	49	5,698	116	49	5,824	119	53	6,150	116	50	5,712	114	47	4,913	105
Mississippi:															
Pearl River	9	861	96	9	861	96	8	814	102	7	684	98	12	1,872	156
Louisiana	62	34,165	551	57	32,913	577	55	30,449	554	58	31,062	536	49	30,330	619
New Orleans	30	32,741	1,091	27	31,567	1,169	23	29,009	1,261	23	28,865	1,255	21	28,454	1,355
Teche	32	1,424	45	30	1,346	45	32	1,440	45	35	2,197	63	28	1,876	67
Texas	36	3,297	92	39	5,891	151	38	3,658	96	39	3,430	88	42	3,584	85
Galveston	31	2,865	92	34	5,459	161	31	2,801	90	32	2,573	80	35	2,728	78
Corpus Christi	2	158	79	2	158	79	2	158	79	2	158	79	2	158	79
Brazos de Santiago	3	274	91	3	274	91	3	274	91	3	274	91	3	274	91
Paso del Norte	......	......	......	......	......	......	2	425	213	2	425	213	2	424	212

COMPARATIVE STATISTICS—Continued.

TABLE 31.—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880-1889 (SAILING VESSELS)—NUMBER, AGGREGATE TONNAGE, AND AVERAGE TONNAGE OF ALL SAILING VESSELS REGISTERED IN THE CUSTOMS DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE 10 YEARS 1880-1889.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.	Number.	Tonnage. Total.	Tonnage. Average.
Total	14, 609	1, 912, 800	131	14, 576	1, 884, 739	129	14, 593	1, 876, 736	129	14, 500	1, 889, 438	130	14, 489	1, 918, 006	132
Maine	2, 556	491, 348	192	2, 471	487, 222	197	2, 494	507, 819	204	2, 504	513, 864	205	2, 462	519, 749	211
Passamaquoddy	186	18, 803	101	179	17, 676	99	176	17, 803	101	179	17, 075	95	171	15, 557	91
Machias	172	19, 190	112	151	14, 414	95	162	14, 325	88	176	16, 647	95	187	20, 792	111
Frenchman Bay	242	14, 817	61	241	15, 000	62	240	14, 457	60	244	14, 499	59	231	14. 579	63
Castine	318	19, 057	60	310	18, 845	61	292	16, 778	57	269	16, 170	60	251	14, 113	56
Bangor	167	26, 129	156	152	24, 829	163	160	26, 095	163	159	24, 942	157	170	26, 719	157
Belfast	234	46, 967	201	228	45, 927	201	234	49, 213	210	241	48, 308	200	248	51, 520	208
Waldoboro	411	82. 871	202	394	82, 652	210	403	90. 067	223	403	92, 661	230	368	83, 533	227
Wiscasset	161	9, 713	60	155	8, 584	55	147	7, 956	54	148	7, 600	51	150	7, 326	49
Bath	251	132, 768	529	246	137, 373	558	260	151, 621	583	266	160, 443	603	265	168, 631	636
Portland and Falmouth	346	111, 499	322	347	111, 536	321	351	108, 915	310	356	108, 295	304	357	108, 393	304
Saco	16	550	34	17	1, 454	86	18	1, 624	90	16	2, 017	126	14	2, 273	162
Kennebunk	43	8, 673	202	39	8, 559	219	39	8, 614	221	36	4, 864	135	38	5, 917	156
York	9	311	35	12	373	31	12	351	29	11	343	31	12	396	33
New Hampshire:															
Portsmouth	69	9, 482	137	67	9, 592	143	58	8, 791	152	58	8, 649	149	63	10, 196	162
Massachusetts	2, 136	378, 333	177	2, 078	364, 933	176	2, 081	374, 598	180	2, 043	373, 705	183	1, 957	373, 025	191
Newburyport	51	12, 328	242	46	11, 583	252	44	10, 809	246	53	17, 430	329	54	17, 907	332
Gloucester	472	28, 122	60	463	27, 182	59	473	27, 685	59	497	31, 162	63	495	31, 693	64
Salem and Beverly	64	5, 840	91	61	5, 395	88	61	5, 247	86	45	4, 017	89	38	1, 741	46
Marblehead	61	2, 419	40	52	1, 775	34	56	1, 947	35	48	2, 540	53	42	2, 777	66
Boston and Charlestown	719	237, 882	331	715	227, 638	318	733	237, 122	323	677	224, 730	332	657	227, 456	346
Plymouth	49	2, 499	51	46	2, 119	46	39	1, 912	49	44	2, 357	54	45	2, 408	54
Barnstable	339	30. 066	89	315	27, 817	88	322	30. 171	94	331	32, 729	99	312	30, 936	99
Nantucket	12	226	19	13	279	21	13	243	19	15	314	21	17	475	28
Edgartown	24	1, 540	64	24	1, 895	79	23	1, 439	63	24	1, 362	57	26	1, 572	60
New Bedford	250	41, 875	168	245	40, 923	167	220	39, 460	179	220	38, 442	175	196	34, 659	177
Fall River	95	15, 536	164	98	18, 327	187	97	18, 563	191	89	18, 622	209	75	21, 401	285
Rhode Island	241	16, 588	69	248	17, 048	69	255	19, 900	78	233	18, 305	79	232	19, 812	85
Providence	95	12, 112	127	104	12, 236	118	115	15, 104	131	109	14, 426	132	105	14, 415	137
Newport	123	3, 303	27	119	3, 188	27	113	3, 044	27	97	2, 840	29	100	3, 724	37
Bristol and Warren	23	1, 173	51	25	1, 624	65	27	1, 752	65	27	1, 039	38	27	1, 673	62
Connecticut	641	44, 299	69	635	44, 878	71	595	41, 130	69	551	40, 776	74	538	46, 720	87
Stonington	115	6, 640	58	109	7, 076	65	99	6, 894	70	87	5, 129	59	91	5, 089	56
New London	160	8, 609	54	154	8, 761	57	139	7, 969	57	129	8, 289	64	131	12, 272	94
Middletown	77	7, 508	98	70	6, 799	97	66	6, 323	96	60	6, 043	101	59	6, 274	106
New Haven	137	14, 556	106	146	15, 946	109	134	14, 322	107	130	16, 144	124	115	17. 743	154
Fairfield	152	6, 986	46	156	6, 296	40	157	5, 622	36	145	5, 171	36	142	5, 342	38
New York	2, 754	560, 556	204	2, 759	545, 282	198	2, 679	530, 150	198	2, 671	516, 599	193	2, 709	523, 123	193
New York	2, 495	548, 187	220	2, 499	532, 989	213	2, 444	518, 693	212	2, 451	505, 560	206	2, 488	512, 401	206
Sag Harbor	259	12, 369	48	260	12, 293	47	235	11, 457	49	220	11, 039	50	221	10, 722	49
New Jersey	906	58, 123	64	923	61, 592	67	953	60, 025	63	977	60, 156	62	945	61, 125	65
Newark	37	2, 508	68	28	1, 508	54	27	1, 531	57	38	2, 644	70	44	3, 859	88
Perth Amboy	312	15, 849	51	316	17, 560	56	345	16, 425	48	357	17, 799	50	289	14, 481	50
Little Egg Harbor	71	5, 416	76	66	5, 070	77	64	4, 652	73	63	4, 597	73	59	4, 348	74
Great Egg Harbor	125	14, 823	119	131	16, 483	126	136	16, 604	122	124	14, 348	116	133	17, 449	131
Bridgeton	311	16, 004	51	335	17. 545	52	337	17, 610	52	350	17, 533	50	373	17, 718	48
Burlington	50	3, 523	70	47	3, 426	73	44	3, 203	73	45	3, 235	72	47	3. 270	70
Pennsylvania:															
Philadelphia	643	132, 089	205	637	133, 967	210	587	125, 179	213	582	137, 270	236	574	138, 731	242
Delaware:															
Delaware	159	12, 128	76	153	11, 950	78	144	12, 304	85	156	13, 744	88	157	13, 648	87
Maryland	1, 645	81, 856	50	1, 695	80, 254	47	1, 766	77, 301	44	1, 823	80, 500	44	1, 986	86, 562	44
Baltimore	871	62, 993	72	902	61, 031	68	937	56, 908	61	951	58, 912	62	1, 008	63, 267	63
Annapolis	118	2, 262	19	120	2, 273	19	120	2, 273	19	121	2, 503	21	162	3, 249	20
Eastern	656	16, 601	25	673	16, 950	25	709	18, 120	26	751	19, 085	25	816	20, 046	25
District of Columbia:															
Georgetown	58	1, 920	33	50	1, 568	31	49	2, 290	47	49	2. 340	48	51	3, 066	60

COMPARATIVE STATISTICS—Continued.

.TABLE 31.—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880-1889 (SAILING VESSELS)—Continued.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Virginia	1,061	26,640	25	1,092	25,291	23	1,152	28,610	25	1,126	29,887	27	1,078	32,558	30
Alexandria	87	3,191	37	88	2,872	33	75	2,955	39	72	3,044	42	74	5,386	73
Tappahannock	100	2,418	24	126	2,751	22	135	2,951	22	117	2,967	25	128	3,151	25
Yorktown	141	2,393	17	135	1,994	15	131	2,103	16	201	3,199	16	216	3,880	18
Richmond	21	3,515	167	37	3,768	102	37	4,250	115	45	5,371	119	45	5,817	129
Petersburg	1	16	16	1	190	190	[illegible]	262	87	1	13	13	1	7	7
Norfolk and Portsmouth	353	9,827	28	367	8,647	24	411	10,571	26	347	9,952	29	331	9,744	29
Cherrystone	358	5,280	15	338	5,069	15	360	5,518	15	343	5,341	16	283	4,573	16
North Carolina	289	9,158	32	298	11,731	39	280	8,654	31	285	10,087	35	290	11,755	41
Albemarle	55	938	17	51	954	19	47	861	18	39	617	16	42	646	15
Pamlico	100	2,245	22	107	2,243	21	106	2,172	20	111	2,522	23	101	2,104	21
Beaufort	70	1,096	16	65	1,059	16	67	1,158	17	72	1,214	17	84	1,462	17
Wilmington	64	4,879	76	75	7,475	100	60	4,463	74	63	5,734	91	63	7,543	120
South Carolina	173	5,017	29	178	5,241	29	182	5,703	31	174	7,198	41	171	5,493	32
Georgetown	5	389	78	3	375	125	7	742	106	[illegible]	1,511	168	10	1,547	155
Charleston	151	4,126	27	156	3,977	25	158	4,314	27	144	4,147	29	144	2,885	20
Beaufort	17	502	30	19	889	47	17	647	38	21	1,540	73	17	1,061	62
Georgia	86	9,354	109	95	10,398	109	82	9,976	122	78	13,035	167	87	16,004	184
Savannah	54	3,806	70	61	4,867	80	54	4,906	91	48	5,071	106	46	5,498	120
Brunswick	28	4,320	154	33	5,524	167	26	4,675	180	29	7,957	274	38	9,899	261
St. Mary	4	1,228	307	1	7	7	2	395	198	1	7	7	3	607	202
Florida	323	25,332	78	310	20,630	67	333	20,175	61	355	24,177	68	355	22,918	65
Fernandina	17	4,914	289	17	3,908	230	17	3,531	208	14	2,845	203	15	3,370	225
St. John	18	2,421	135	19	1,942	102	22	2,404	109	20	2,891	145	12	522	44
St. Augustine	1	33	33	2	46	23	4	67	17	4	257	64	6	301	50
Key West	141	3,839	27	134	3,388	25	142	3,500	25	142	3,369	24	139	2,680	19
St. Mark	23	1,726	75	13	1,186	91	34	2,619	77	40	2,976	74	38	931	25
Apalachicola	25	1,265	51	25	255	10	26	1,210	47	24	1,434	60	19	778	41
Pensacola	98	11,134	114	100	9,905	99	88	6,844	78	111	10,405	94	126	14,336	114
Alabama:															
Mobile	73	7,937	109	80	9,338	117	94	9,228	98	99	7,481	76	80	4,521	57
Mississippi:															
Pearl River	119	2,970	25	130	4,608	35	121	3,745	31	121	5,187	43	119	4,297	36
Louisiana	447	31,958	71	442	29,057	66	452	24,264	54	380	19,849	52	411	18,195	44
New Orleans	375	29,928	80	378	27,165	72	387	22,499	58	324	18,473	57	341	16,506	48
Teche	72	2,030	28	64	1,892	30	65	1,765	27	56	1,376	25	70	1,689	24
Texas	230	7.712	34	235	10,159	43	236	6,894	29	235	6,629	28	224	6,508	29
Galveston	154	5,749	37	159	7,865	49	154	4,092	27	163	4,876	30	151	4,749	31
Saluria	37	838	23	31	772	25	29	732	25	27	696	26	29	548	19
Corpus Christi	28	898	32	34	1,241	37	42	1,796	43	36	814	23	32	753	24
Brazos de Santiago	11	227	21	11	281	26	11	274	25	9	243	27	12	458	38

COMPARATIVE STATISTICS—Continued.

TABLE 31.—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880–1889 (SAILING VESSELS)—Continued.

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Total	14, 354	1, 860, 058	130	13, 937	1, 742, 766	125	13, 652	1, 665, 070	122	13, 459	1, 584, 309	118	13, 336	1, 525, 315	114
Maine	2, 356	464, 510	197	2, 271	434, 824	191	2, 127	392, 025	184	2, 088	376, 441	180	1, 968	341, 693	174
Passamaquoddy	162	14, 661	91	162	14, 742	91	148	13, 155	89	159	14, 907	94	144	14, 545	101
Machias	191	19, 096	100	180	17, 763	99	176	16, 395	93	185	16, 283	88	189	16, 511	87
Frenchman Bay	221	13, 702	62	234	15, 509	66	222	13, 222	60	219	13, 766	63	214	14, 042	66
Castine	250	14, 458	58	231	13, 024	56	231	12, 738	55	240	13, 582	57	249	13, 588	55
Bangor	155	22, 891	148	149	20, 593	138	145	20, 623	142	133	20, 307	153	134	22, 555	168
Belfast	251	47, 591	190	230	41, 263	179	185	33, 424	181	168	31, 237	186	147	25, 433	173
Waldoboro	344	75, 195	219	335	69, 579	208	336	69, 597	207	338	60, 214	178	310	50, 139	162
Wiscasset	148	7, 105	48	139	7, 511	54	129	8, 267	64	114	6, 845	60	96	6, 178	64
Bath	231	141, 277	612	228	136, 139	597	216	124, 552	577	216	125, 637	582	183	101, 820	556
Portland and Falmouth	343	102, 610	299	326	93, 026	285	286	75, 208	263	267	69, 294	260	265	73, 193	276
Saco	16	2, 152	135	16	1, 960	123	15	1, 399	93	14	1, 079	77	9	643	71
Kennebunk	31	3, 357	108	31	3, 385	109	29	3, 142	108	26	2, 955	114	23	2, 838	123
York	13	415	32	10	330	33	9	303	34	9	335	37	5	208	42
New Hampshire:															
Portsmouth	59	10, 502	178	58	10, 033	173	58	10, 047	173	56	9, 731	174	55	9, 657	176
Massachusetts	1, 902	370, 925	195	1, 834	361, 794	197	1, 718	341, 769	199	1, 695	337, 101	199	1, 621	306, 749	189
Newburyport	46	16, 169	352	48	15, 585	325	25	12, 265	491	25	11, 771	471	17	8, 536	502
Gloucester	504	33, 734	67	486	32, 955	68	472	32, 322	68	460	32, 395	70	453	33, 281	73
Salem and Beverly	36	1, 913	53	34	2, 149	63	45	4, 575	102	38	4, 110	108	32	2, 560	80
Marblehead	42	2, 963	71	39	2, 855	73	33	2, 304	70	31	2, 909	94	25	2, 122	85
Boston and Charlestown	627	225, 635	360	598	219, 022	366	532	202, 488	381	551	201, 671	366	542	186, 908	345
Plymouth	34	1, 694	50	30	1, 356	45	24	1, 209	50	19	956	50	18	1, 026	57
Barnstable	305	29, 609	97	306	28, 862	94	296	27, 835	94	281	24, 706	88	273	21, 503	79
Nantucket	17	410	24	15	463	31	15	458	31	19	488	26	20	435	22
Edgartown	23	1, 235	54	20	981	49	20	986	49	31	935	30	33	1, 309	40
New Bedford	197	34, 110	173	188	33, 092	176	182	32, 374	178	172	31, 012	180	150	27, 226	182
Fall River	71	23, 453	330	70	24, 474	350	74	24, 953	337	68	26, 148	385	58	21, 843	377
Rhode Island	226	18, 577	82	214	17, 293	81	189	15, 476	82	189	15, 148	80	190	14, 461	76
Providence	97	13, 389	138	97	12, 464	128	77	10, 599	138	75	9, 759	130	72	8, 590	119
Newport	101	3, 802	38	90	3, 500	39	88	3, 634	41	90	4, 109	46	96	4, 730	49
Bristol and Warren	28	1, 386	50	27	1, 329	49	24	1, 243	52	24	1, 280	53	22	1, 141	52
Connecticut	522	45, 960	88	504	47, 418	94	488	49, 368	101	483	54, 212	112	457	52, 277	114
Stonington	98	4, 413	45	94	4, 192	45	96	4, 244	44	102	4, 412	43	102	3, 988	39
New London	123	11, 821	96	121	12, 360	102	124	13, 565	109	119	15, 058	127	114	15, 607	137
Middletown	56	5, 938	106	56	6, 068	108									
Hartford							45	4, 801	107	40	3, 744	94	39	3, 465	89
New Haven	110	18, 080	164	103	19, 229	187	98	21, 560	220	103	25, 271	245	92	23, 951	260
Fairfield	135	5, 708	42	130	5, 569	43	125	5, 198	42	119	5, 727	48	110	5, 266	48
New York	2, 651	525, 470	198	2, 454	459, 990	187	2, 441	453, 686	186	2, 329	409, 455	176	2, 361	430, 645	182
New York	2, 437	513, 908	211	2, 250	449, 223	200	2, 230	442, 840	199	2, 112	400, 191	189	2, 167	422, 664	195
Sag Harbor	214	11, 562	54	204	10, 767	53	211	10, 846	51	217	9, 264	43	194	7, 981	41
New Jersey	924	61, 491	67	958	59, 949	63	942	59, 358	63	979	58, 346	60	997	57, 547	58
Newark	31	2, 046	66	37	3, 134	85	39	2, 905	74	34	2, 757	81	34	2, 894	85
Perth Amboy	282	14, 988	53	286	14, 490	51	279	15, 265	55	293	14, 512	50	307	14, 688	48
Little Egg Harbor	59	4, 294	73	50	3, 950	79	47	3, 905	83	43	2, 993	70	42	2, 679	64
Great Egg Harbor	129	17, 458	135	127	16, 327	129	132	16, 787	127	151	17, 227	114	165	17, 837	108
Bridgeton	392	20, 259	52	426	19, 601	46	421	18, 901	45	434	19, 141	44	425	17, 767	42
Burlington	31	2, 446	79	32	2, 447	76	24	1, 595	66	24	1, 716	72	24	1, 682	70
Pennsylvania:															
Philadelphia	533	132, 328	248	526	143, 162	272	524	129, 867	248	501	125, 316	250	484	118, 695	245
Delaware:															
Delaware	160	14, 847	93	149	12, 670	85	161	12, 835	80	172	13, 409	78	164	15, 142	92
Maryland	2, 098	91, 261	43	2, 054	88, 240	43	2, 056	84, 648	41	1, 988	82, 424	41	2, 010	76, 744	38
Baltimore	1, 083	68, 090	63	1, 058	66, 001	62	1, 034	62, 517	60	997	61, 346	62	990	55, 425	56
Annapolis	159	3, 068	19	129	2, 832	22	148	3, 109	21	144	3, 115	22	154	3, 309	21
Eastern	856	20, 103	23	867	19, 407	22	874	19, 022	22	847	17, 963	21	856	18, 010	21
District of Columbia:															
Georgetown	41	1, 099	27	35	937	27	41	1, 301	32	47	2, 283	49	71	2, 996	42

COMPARATIVE STATISTICS—Continued.

TABLE 31.—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880—1889 (SAILING VESSELS)—Continued.

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Virginia	1, 135	37, 442	33	1, 167	34, 442	30	1, 189	35, 435	30	1, 207	32, 982	27	1, 212	32, 699	27
Alexandria	70	4, 960	71	66	4, 457	68	56	3, 140	56	62	3, 892	63	63	1, 574	25
Tappahannock	145	3, 846	27	143	3, 883	27	140	3, 608	26	134	3, 429	26	139	3, 620	26
Yorktown	211	3, 582	17	209	3, 469	17	219	5, 907	27	219	5, 732	26	209	5, 091	24
Richmond	48	8, 035	167	42	5, 614	134	47	4, 845	103	50	5, 472	109	47	3, 902	83
Petersburg	2	19	10	4	45	11	3	30	10	3	30	10	3	30	10
Norfolk and Portsmouth	350	12, 020	34	367	11, 372	31	379	12, 209	32	385	8, 620	22	396	12. 878	33
Cherrystone	309	4. 980	16	336	5, 602	17	345	5, 696	17	354	5, 807	16	355	5. 604	16
North Carolina	288	10, 167	35	273	8, 275	30	285	8. 109	28	298	8, 017	27	320	7, 412	23
Albemarle	44	610	14	44	578	13	50	696	14	51	682	13	58	870	15
Pamlico	102	1, 973	19	98	1, 928	20	99	1, 916	19	105	2, 028	19	109	1, 961	18
Beaufort	83	1. 434	17	85	1, 498	18	99	1, 745	18	106	1, 750	17	121	2, 012	17
Wilmington	59	6, 160	104	46	4, 271	93	37	3, 752	101	36	3, 557	99	32	2, 569	80
South Carolina	175	6. 045	35	157	5, 396	34	160	5, 860	37	163	4, 769	29	169	5. 234	31
Georgetown	11	1, 826	166	8	967	121	9	1, 203	134	11	1, 700	155	10	1, 350	135
Charleston	149	3, 919	26	134	3, 600	27	141	4. 448	32	135	2, 713	20	140	3, 156	23
Beaufort	15	300	20	15	829	55	10	209	21	17	356	21	19	728	38
Georgia	82	11, 807	144	82	8, 636	105	85	9, 148	108	80	6, 922	87	83	6, 612	80
Savannah	52	4, 509	87	56	3, 125	56	57	2, 119	37	54	2, 582	48	58	2, 161	37
Brunswick	28	6, 753	241	23	4, 628	201	26	6, 484	249	24	4, 022	168	24	4, 428	185
St. Mary	2	545	273	3	883	294	2	545	273	2	318	159	1	23	23
Florida	379	27, 920	74	376	21, 281	57	396	25, 117	63	406	20, 037	49	400	17, 632	44
Fernandina	14	3, 202	229	12	2, 920	243	13	3, 519	271	14	3, 975	284	12	2, 939	245
St. John	24	2, 784	116	23	1, 935	84	19	2, 497	131	24	1, 739	72	27	1, 854	69
St. Augustine	5	56	11	5	56	11	8	133	17	12	187	16	15	253	17
Key West	139	3, 744	27	156	3, 846	25	167	3, 570	21	173	3, 886	22	146	2, 505	17
St. Mark	44	663	15	38	403	11	36	604	17	34	639	19	26	343	13
Apalachicola	25	368	15	28	610	22	28	2, 264	81	27	1, 999	74	25	1, 632	65
Pensacola	128	17, 103	134	114	11, 511	101	125	12, 530	100	122	7, 612	62	124	7, 870	63
Tampa	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	236	9
Alabama:															
Mobile	82	4, 800	59	75	4, 833	64	63	3. 136	50	70	3, 869	55	77	4, 986	65
Mississippi:															
Pearl River	120	4, 535	38	142	5, 092	36	148	8, 697	59	150	6, 865	46	158	9, 268	59
Louisiana	409	15, 639	38	396	12, 767	32	389	12. 575	32	377	11. 893	32	360	10, 365	29
New Orleans	341	13, 863	41	325	11, 414	35	314	11, 233	36	302	10, 670	35	287	9, 169	32
Teche	68	1, 776	26	71	1, 353	19	75	1, 342	18	75	1, 223	16	73	1, 196	16
Texas	212	4, 733	22	212	5, 734	27	192	6, 613	34	181	5, 089	28	179	4, 501	25
Galveston	147	3, 572	24	151	4, 335	29	147	5, 414	37	142	4 404	31	138	3, 800	28
Saluria	26	346	13	23	303	13	15	212	14	13	195	15	11	183	17
Corpus Christi	29	617	21	29	921	32	24	843	35	22	382	17	25	387	15
Brazos de Santiago	10	198	20	9	175	19	6	144	24	4	108	27	5	131	26

COMPARATIVE STATISTICS—Continued.

TABLE **32.**—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880–1889 (UNRIGGED CRAFT)—NUMBER, AGGREGATE TONNAGE, AND AVERAGE TONNAGE OF ALL UNRIGGED CRAFT REGISTERED IN THE CUSTOMS DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE 10 YEARS 1880–1889.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Total	621	113, 247	181	649	123, 376	190	772	144, 586	187	772	150, 271	195	740	145, 826	197
Maine	2	406	203	2	406	203	3	973	324	3	973	324	2	718	359
Waldoboro	1	255	255	1	255	255	1	255	255	1	255	255	....	....	....
Bath	1	151	151	1	151	151	2	718	359	2	718	359	2	718	359
Massachusetts	11	3, 162	287	11	3, 573	325	11	3, 573	325	12	3, 995	333	11	3, 713	338
Newburyport	2	87	44	2	87	44	2	87	44	2	87	44	2	87	44
Fall River	9	3, 075	342	9	3, 486	387	9	3 486	387	10	3, 908	391	9	3, 626	403
Connecticut	73	8, 396	115	85	11, 885	140	154	23, 214	151	179	27, 996	156	171	26, 861	157
New London	3	289	96	7	1. 184	169	10	2, 033	203	17	4, 012	236	15	3, 893	260
Middletown	4	641	160	14	2. 937	210	19	3, 853	203	20	4, 098	205	19	3. 789	199
New Haven	64	7. 160	112	63	7, 616	121	124	17, 180	139	140	19, 660	140	135	18, 953	140
Fairfield	2	306	153	1	148	148	1	148	148	2	226	113	2	226	113
New York	405	81, 765	202	411	83, 837	204	435	87, 107	.200	443	88, 384	200	455	91, 497	201
New York	402	79, 196	197	408	81, 268	199	432	84, 538	196	441	86, 446	196	454	90, 716	200
Sag Harbor	3	2, 569	856	3	2, 569	856	3	2, 569	856	2	1, 938	969	1	781	781
New Jersey	68	11, 690	172	80	15, 807	198	106	21, 204	200	89	21, 381	240	48	14, 047	293
Perth Amboy	61	10, 661	175	73	14. 778	202	99	20, 175	204	82	20, 352	248	48	14, 047	293
Burlington	7	1, 029	147	7	1, 029	147	7	1, 029	147	7	1, 029	147	....	....	....
Pennsylvania:															
Philadelphia	29	4, 822	166	30	5, 264	175	29	5, 216	180	29	5, 216	180	31	6, 100	197
Delaware:															
Delaware	2	117	59	....	....	....	2	596	298	....	....	....	....	....	....
Maryland	4	423	106	3	249	83	3	249	83	4	1, 177	294	8	1, 812	227
Baltimore	4	423	106	3	249	83	3	249	83	4	1, 177	294	8	1, 812	227
Eastern	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Virginia	3	199	66	2	156	78	2	156	78	....	....	....	....	....	....
Yorktown	1	43	43	....	....	....	....	....	....	....	....	....	....	....	....
Richmond	2	156	78	2	156	78	2	156	78	....	....	....	....	....	....
South Carolina:															
Beaufort	1	51	51	....	....	....	....	....	....	....	....	....	....	....	....
Alabama:															
Mobile	4	349	87	4	349	87	4	174	44	10	414	41	10	414	41
Mississippi:															
Pearl River	18	1, 180	66	19	1, 263	66	19	1, 263	66	....	....	....	....	....	....
Louisiana:															
Teche	2	100	50	....	....	....	....	....	....	....	....	....	....	....	....
Texas	2	587	294	2	587	294	4	861	215	3	735	245	4	664	166
Galveston	2	587	294	2	587	294	4	861	215	3	735	245	2	441	221
Corpus Christi	....	....	....	....	....	....	....	....	....	....	....	....	2	223	112

COMPARATIVE STATISTICS—Continued.

TABLE 32.—AGGREGATES AND AVERAGES FOR THE 10 YEARS 1880-1889 (UNRIGGED CRAFT)—Continued.

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Total	746	148,289	199	763	153,380	201	697	156,414	224	958	217,616	227	1,000	231,422	231
Maine	2	822	411	4	2,272	568	8	4,418	552	13	10,292	792	12	10,109	842
Machias							1	122	122						
Bangor							1	238	238	1	238	238	1	238	238
Waldoboro	1	255	255												
Bath	1	567	567	4	2,272	568	6	4,058	676	12	10,054	838	11	9,871	897
Massachusetts	10	2,971	297	11	3,751	341	15	8,164	544	26	18,977	730	33	23,968	726
Newburyport	2	87	44	2	87	44	2	87	44	2	87	44	2	87	44
Gloucester										1	122	122	1	122	122
Boston and Charlestown							4	4,362	1,091	14	15,053	1,075	20	19,610	981
Fall River	8	2,884	361	9	3,664	407	9	3,715	413	9	3,715	413	10	4,149	415
Rhode Island: Providence				2	689	345	3	1,046	349	3	1,046	349	3	1,046	349
Connecticut	163	25,895	159	161	25,841	161	38	9,059	238	163	26,809	164	171	28,950	169
Stonington													1	482	482
New London	15	3,839	256	15	4,002	267	17	4,902	288	18	5,207	289	20	5,571	279
Middletown	20	3,984	199	21	4,133	197									
New Haven	126	17,846	142	124	17,558	142				121	16,828	139	124	17,984	145
Fairfield	2	226	113	1	148	148	2	297	149	4	570	143	4	570	143
Hartford							19	3,860	203	20	4,204	210	22	4,343	197
New York	466	94,188	202	477	95,042	199	515	103,270	201	621	126,277	203	632	130,237	206
New York	465	93,407	201	476	94,261	198	514	102,489	199	620	125,496	202	631	129,455	205
Sag Harbor	1	781	781	1	781	781	1	781	781	1	781	781	1	782	782
New Jersey	48	13,954	291	50	14,409	288	54	16,406	304	63	20,463	325	71	21,952	309
Perth Amboy	48	13,954	291	50	14,409	288	54	16,406	304	63	20,463	325	70	21,802	311
Burlington													1	150	150
Pennsylvania: Philadelphia	32	6,693	209	33	7,301	221	34	8,513	250	31	7,384	238	46	11,137	242
Maryland	9	2,208	245	9	2,208	245	9	2,207	245	17	3,241	191	16	2,338	146
Baltimore	9	2,208	245	9	2,208	245	9	2,207	245	17	3,241	191	10	1,391	139
Eastern													6	947	158
District of Columbia: Georgetown	1	508	508	1	508	508	2	742	371						
Virginia							1	815	815	1	71	71	1	71	71
Yorktown							1	815	815						
Tappahannock										1	71	71	1	71	71
Georgia: Savannah										2	1,177	589	1	9	9
Florida: St. Mark							1	32	32						
Alabama: Mobile	11	460	42	8	326	41	9	538	60	9	538	60	6	413	69
Texas	4	590	148	7	1,033	148	8	1,204	151	9	1,341	149	8	1,192	149
Galveston	2	367	184	5	810	162	6	981	164	6	981	164	5	833	167
Corpus Christi	2	223	112	2	223	112	2	223	112	2	223	112	2	223	112
Paso del Norte										1	137	137	1	136	136

COMPARATIVE STATISTICS—Continued.

TABLE 33.—TONNAGE FLUCTUATIONS FOR THE 10 YEARS 1880–1889 (ALL VESSELS)—AVERAGE ANNUAL NUMBER AND AVERAGE ANNUAL TONNAGE OF ALL VESSELS REGISTERED IN THE CUSTOMS DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE 10 YEARS 1880–1889, WITH THE YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Maine:																
Passamaquoddy	180	1880	197	1889	157	1885	180	40	20,212	1880	23,510	1887	17,802	1883	20,291	5,708
Machias	182	1885	196	1881	155	1883	181	41	17,265	1884	20,952	1882	14,400	1883	16,737	6,552
Frenchman Bay	237	1883	250	1889	226	1884	236	24	14,667	1886	16,003	1887	13,743	1884	14,704	2,260
Castine	266	1880	319	1887	233	1883	270	86	15,267	1880	19,082	1887	12,768	1885	14,483	6,314
Bangor	163	1884	182	1888	144	1886	161	38	24,362	1884	27,525	1888	21,281	1889	23,895	6,244
Belfast	219	1885	255	1889	148	1881	230	107	42,197	1884	51,677	1889	25,468	1886	41,355	26,209
Waldoboro	370	1880	421	1889	316	1884	372	105	76,703	1883	93,709	1889	50,987	1885	76,588	42,722
Wiscasset	141	1880	164	1889	97	1886	141	67	7,807	1880	9,851	1889	6,228	1883	7,684	3,623
Bath	268	1884	299	1889	224	1881	272	75	144,818	1884	173,749	1889	117,415	1885	145,374	56,334
Portland and Falmouth	355	1884	387	1889	301	1886	365	86	105,833	1884	119,900	1888	79,865	1886	105,306	40,035
Saco	18	1882	21	1889	11	1880	18	10	1,721	1884	2,504	1880	655	1887	1,597	1,849
Kennebunk	34	1880	43	1889	24	1886	32	19	5,239	1880	8,673	1889	2,864	1883	4,864	5,809
York	10	1885	13	1889	5	1886	10	8	337	1885	415	1889	208	1888	335	207
New Hampshire:																
Portsmouth	67	1880	74	1889	63	1883	66	11	10,017	1885	10,891	1882	9,045	1889	10,057	1,846
Massachusetts:																
Newburyport	57	1884	72	1889	28	1882	61	44	14,322	1884	18,910	1889	9,091	1880	13,188	9,819
Gloucester	484	1885	510	1889	462	1887	479	48	31,273	1885	33,943	1881	27,302	1883	31,342	6,641
Salem and Beverly	49	1880	68	1889	36	1883	48	32	3,917	1880	6,651	1884	1,772	1883	4,060	4,879
Marblehead	44	1880	61	1889	28	1885	44	33	2,491	1885	3,036	1881	1,791	1883	2,540	1,245
Boston and Charlestown	742	1882	835	1887	628	1885	723	207	261,030	1885	267,805	1887	249,864	1883	261,424	17,941
Plymouth	36	1880	51	1889	19	1885	35	32	2,055	1880	2,963	1888	1,300	1882	2,071	1,663
Barnstable	309	1880	340	1889	275	1886	307	65	28,458	1883	32,736	1889	21,617	1886	28,908	11,119
Nantucket	17	1889	20	1887	15	1883	17	5	1,077	1884	1,537	1889	435	1886	1,041	1,102
Edgartown	25	1889	34	1886	20	1881	25	14	1,328	1881	1,906	1888	935	1889	1,325	971
New Bedford	215	1880	265	1889	162	1885	209	103	38,338	1880	44,838	1889	31,349	1884	36,979	13,489
Fall River	109	1881	125	1889	89	1884	106	36	45,495	1888	53,064	1880	34,663	1883	44,817	18,401
Rhode Island:																
Providence	126	1882	144	1888	108	1885	127	36	32,882	1882	37,544	1888	28,705	1885	32,881	8,839
Bristol and Warren	31	1882	36	1887	27	1880	31	9	1,549	1882	2,039	1883	1,224	1885	1,511	815
Newport	118	1880	144	1886	104	1889	118	40	5,547	1889	7,421	1883	4,562	1885	5,394	2,859
Connecticut:																
Stonington	109	1880	124	1883	99	1885	109	25	6,652	1881	8,263	1889	5,204	1885	6,669	3,059
New London	184	1880	200	1886	172	1882	185	28	31,043	1889	38,807	1880	22,232	1885	31,881	16,575
Middletown	100	1880	106	1885	94	1883	99	12	14,442	1881	15,404	1880	14,066	1882	14,501	1,338
Hartford	83	1887	85	1889	81	1882	82	4	12,002	1887	12,623	1889	11,313	1888	12,071	1,310
New Haven	261	1883	312	1887	146	1880	268	166	40,791	1888	51,613	1880	28,178	1882	38,550	23,435
Fairfield	169	1882	176	1889	164	1881	170	12	10,955	1889	13,532	1882	9,222	1885	11,264	4,310
New York:																
New York	3,837	1884	3,986	1880	3,721	1882	3,830	265	926,129	1885	971,485	1888	895,481	1889	925,015	76,004
Sag Harbor	253	1881	294	1889	218	1883	250	76	14,746	1881	17,209	1889	11,493	1885	14,660	5,716
New Jersey:																
Newark	68	1884	79	1881	58	1888	68	21	5,983	1884	7,369	1881	4,485	1883	6,002	2,884
Perth Amboy	425	1882	517	1885	374	1889	423	143	41,198	1882	48,648	1886	36,197	1888	42,190	12,451
Little Egg Harbor	58	1880	72	1888	43	1884	60	29	4,301	1880	5,583	1889	2,731	1884	4,396	2,852
Great Egg Harbor	140	1889	169	1883	127	1882	139	42	16,813	1889	18,123	1883	14,530	1886	16,788	3,593
Bridgeton	385	1888	438	1880	314	1884	378	124	18,607	1885	21,087	1880	16,153	1889	18,162	4,934
Burlington	55	1880	75	1887	36	1884	66	39	5,800	1880	8,923	1887	2,758	1884	7,526	6,165
Pennsylvania:																
Philadelphia	866	1880	941	1888	796	1885	842	145	213,192	1886	225,300	1889	203,027	1887	215,450	22,273
Delaware:																
Delaware	183	1888	202	1882	165	1880	182	37	17,645	1885	19,946	1881	16,090	1888	17,616	3,856
Maryland:																
Baltimore	1,147	1885	1,262	1880	1,013	1889	1,163	249	112,709	1885	123,493	1881	99,739	1889	114,037	23,754
Annapolis	138	1884	162	1880	118	1888	144	44	2,836	1889	3,309	1880	2,262	1886	2,938	1,047
Eastern	795	1887	878	1880	657	1884	818	221	18,824	1885	20,172	1880	16,620	1882	18,428	3,552
District of Columbia:																
Georgetown	84	1889	108	1886	67	1883	84	41	10,437	1889	11,741	1880	8,771	1882	10,568	2,970
Virginia:																
Alexandria	83	1881	100	1887	66	1883	84	34	4,115	1884	5,952	1889	2,069	1880	3,945	3,883
Tappahannock	135	1885	148	1880	102	1881	130	46	3,517	1886	4,053	1880	2,669	1884	3,243	1,384
Yorktown	192	1887	224	1882	131	1883	202	93	4,220	1887	7,534	1881	1,994	1886	4,289	5,540
Richmond	60	1888	66	1880	39	1882	59	27	6,695	1885	10,017	1880	4,657	1886	6,641	5,360
Petersburg	5	1886	8	1880	3	1883	5	5	179	1882	278	1880	47	1883	175	231
Norfolk and Portsmouth	430	1882	478	1884	397	1881	426	81	15,806	1889	18,976	1881	13,326	1882	16,041	5,650
Cherrystone	341	1882	362	1884	285	1881	338	77	5,504	1889	6,310	1884	4,592	1882	5,537	1,718
North Carolina:																
Albemarle	75	1889	91	1883	64	1880	76	27	2,940	1889	3,321	1883	2,746	1886	2,883	575
Pamlico	119	1889	132	1880	106	1882	118	26	3,056	1883	3,454	1880	2,629	1882	3,033	825
Beaufort	87	1889	124	1881	65	1885	87	59	1,532	1889	2,166	1881	1,059	1886	1,597	1,107
Wilmington	69	1881	89	1889	51	1885	75	38	6,496	1884	9,469	1889	4,079	1882	6,289	5,390
South Carolina:																
Georgetown	20	1888	24	1881	11	1884	21	13	1,908	1885	2,679	1881	595	1886	1,939	2,084
Charlestown	177	1882	189	1886	160	1884	177	29	8,920	1881	10,057	1888	7,719	1882	8,572	2,338
Beaufort	24	1889	30	1885	21	1886	24	9	1,173	1883	1,853	1885	709	1881	1,085	1,144

COMPARATIVE STATISTICS—Continued.

TABLE 33.—TONNAGE FLUCTUATIONS FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Georgia:																
Savannah	84	1889	93	1880	72	1881	81	21	23, 394	1884	27, 777	1880	14, 310	1887	23, 806	13, 467
Brunswick	43	1884	50	1883	37	1887	43	13	7, 357	1884	10, 832	1880	5, 286	1881	6, 896	5, 546
St. Mary	4	1880	7	1881	3	1882	4	4	545	1880	1, 522	1889	75	1885	579	1, 447
Florida:																
Fernandina	17	1881	20	1887	14	1884	17	6	3, 765	1880	4, 938	1889	3, 120	1884	3, 725	1, 818
St. John	58	1886	75	1884	12	1882	59	63	5, 249	1887	7, 309	1884	522	1882	5, 259	6, 787
St. Augustine	9	1889	23	1880	2	1885	8	21	285	1888	578	1880	60	1884	301	518
Key West	162	1888	195	1881	143	1889	155	52	6, 572	1886	7, 851	1889	4, 172	1882	6, 462	3, 679
St. Mark	41	1885	53	1881	20	1882	42	33	1, 747	1883	3, 179	1889	715	1881	1, 598	2, 464
Apalachicola	36	1888	42	1884	30	1882	35	12	2, 541	1887	3, 653	1881	1, 412	1880	2, 504	2, 241
Pensacola	133	1887	147	1882	107	1886	133	40	12, 583	1885	18, 546	1888	8, 927	1880	12, 289	9, 619
Tampa	37	......	......	......	......	1889	37	....	929	......	....	......	....	1889	929	....
Alabama:																
Mobile	134	1883	154	1880	121	1886	132	33	12, 458	1882	16, 611	1887	9, 824	1883	13, 676	6, 787
Mississippi:																
Pearl River	150	1889	170	1885	129	1886	151	41	6, 847	1889	11, 140	1880	4, 966	1881	6, 527	6, 174
Louisiana:																
New Orleans	362	1882	411	1889	308	1884	368	103	46, 751	1880	57, 848	1889	37, 623	1885	46, 604	20, 225
Teche	99	1888	110	1883	84	1885	100	26	3, 166	1880	3, 777	1886	2, 699	1885	3, 200	1, 078
Texas:																
Galveston	187	1883	197	1889	178	1884	186	19	8, 873	1881	12, 465	1885	6, 804	1887	9, 196	5, 661
Saluria	24	1880	37	1889	11	1886	23	26	483	1880	838	1889	183	1884	548	655
Corpus Christi	33	1882	43	1888	26	1885	33	17	1, 121	1882	1, 908	1888	763	1884	1, 134	1, 145
Brazos de Santiago	12	1884	16	1888	7	1883	12	9	667	1880	1, 222	1888	382	1883	691	840
Paso del Norte	3	......	......	1887	2	1888	3	1	516	1888	562	1887	425	1889	560	137

TABLE 34.—TONNAGE FLUCTUATIONS FOR THE 10 YEARS 1880-1889 (STEAMERS)—AVERAGE ANNUAL NUMBER AND AVERAGE ANNUAL TONNAGE OF ALL STEAMERS REGISTERED IN THE CUSTOMS DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE 10 YEARS 1880-1889, WITH THE YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Maine:																
Passamaquoddy	13	1885	18	1880	11	1883	13	7	4, 320	1888	5, 040	1883	3, 216	1884	4, 416	1, 824
Machias	5	1884	7	1880	4	1883	5	3	111	1880	165	1882	75	1889	109	90
Frenchman Bay	6	1888	13	1880	1	1883	6	12	308	1888	740	1880	32	1885	218	708
Castine	2	1886	3	1880	1	1887	2	2	35	1889	78	1880	25	1887	30	53
Bangor	10	1889	13	1880	7	1888	10	6	722	1889	1, 102	1882	404	1887	726	698
Belfast	3	1883	4	1889	1	1882	3	3	109	1883	157	1889	35	1880	97	122
Waldoboro	6	1880	9	1883	4	1888	6	5	925	1884	1, 138	1883	793	1880	891	345
Wiscasset	2	1880	3	1887	1	1882	2	2	109	1888	229	1889	50	1885	106	179
Bath	27	1884	32	1880	22	1882	27	10	3, 864	1889	5, 724	1881	3, 019	1888	4, 165	2, 705
Portland and Falmouth	31	1886	39	1881	22	1884	30	17	9, 636	1886	12, 280	1881	6, 699	1887	9, 306	5, 581
Saco	3	1883	4	1880	2	1882	3	2	206	1883	303	1880	105	1887	198	198
Kennebunk	1	......	......	......	......	1886	1	....	21	1888	26	1886	15	1889	26	11
New Hampshire:																
Portsmouth	7	1888	9	1880	5	1881	7	4	349	1888	418	1880	206	1884	378	212
Massachusetts:																
Newburyport	14	1881	16	1889	9	1886	14	7	796	1884	916	1889	468	1887	801	448
Gloucester	6	1886	8	1884	1	1881	6	7	196	1888	311	1884	69	1885	209	242
Salem and Beverly	4	1887	6	1881	1	1880	4	5	162	1880	811	1881	14	1886	170	797
Marblehead	2	1889	3	1881	1	1885	2	2	42	1885	73	1886	11	1887	49	62
Boston and Charlestown	103	1884	132	1881	88	1882	102	44	38, 072	1889	50, 533	1881	25, 913	1883	36, 694	24, 620
Plymouth	1	1880	2	......	......	1881	1	1	335	1880	464	1882	159	1883	344	305
Barnstable	1	1889	2	......	......	1880	1	1	58	1889	114	1883	7	1886	46	107
Nantucket	2	1880	4	1886	1	1883	2	3	998	1880	1, 080	1886	578	1883	1, 062	502
Edgartown	1	......	......	......	......	1889	1	....	14	1889	16	1881	11	1889	16	5
New Bedford	13	1887	16	1881	11	1883	13	5	3, 021	1889	4, 123	1881	2, 308	1880	2, 963	1, 815
Fall River	20	1883	22	1881	18	1880	20	4	20, 593	1889	24, 443	1881	16, 051	1885	21, 802	8, 392
Rhode Island:																
Providence	31	1884	37	1881	27	1880	30	10	20, 190	1882	22, 440	1887	17, 848	1884	19, 889	4, 592
Newport	17	1889	22	1885	11	1881	17	11	1, 960	1889	2, 691	1884	1, 580	1880	1, 968	1, 111
Bristol and Warren	6	1881	10	1885	3	1883	6	7	185	1882	287	1885	125	1883	185	162
Connecticut:																
Stonington	10	1883	12	1888	7	1887	10	5	1, 397	1885	2, 256	1889	736	1884	1, 376	1, 520
New London	39	1884	46	1882	36	1885	38	10	16, 118	1888	17, 866	1880	13, 334	1886	16, 106	4, 532
Middletown	20	1880	25	1885	18	1882	19	7	4, 672	1880	5, 917	1886	3, 887	1883	4, 445	2, 030
New Haven	42	1888	53	1880	25	1883	42	28	8, 032	1888	9, 514	1880	6, 462	1883	7, 731	3, 052
Fairfield	30	1889	50	1880	12	1884	28	38	4, 980	1889	7, 696	1880	3, 171	1884	4, 957	4, 525
Hartford	21	1888	22	1889	20	1887	21	2	3, 863	1888	4, 123	1889	3, 505	1887	3, 962	618

COMPARATIVE STATISTICS—Continued.

TABLE 34.—TONNAGE FLUCTUATIONS FOR THE 10 YEARS 1880-1889 (STEAMERS)—Continued.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
New York:																
New York	995	1889	1,076	1880	824	1883	978	252	344,736	1889	372,896	1880	290,674	1883	336,327	82,222
Sag Harbor	28	1882	33	1889	23	1883	28	10	2,483	1887	3,024	1880	1,955	1882	2,547	1,069
New Jersey:																
Newark	33	1889	36	1880	27	1886	34	9	3,404	1887	3,761	1880	2,808	1882	3,450	953
Perth Amboy	53	1882	73	1886	40	1884	48	33	8,887	1882	12,048	1888	7,215	1884	8,178	4,833
Little Egg Harbor	2	1885	3	1880	1	1882	2	2	123	1882	215	1887	42	1880	167	173
Great Egg Harbor	4	1887	7	1880	2	1881	4	5	278	1888	553	1880	36	1889	286	517
Bridgeton	4	1885	7	1880	3	1883	4	4	400	1885	828	1880	149	1888	395	679
Burlington	15	1883	20	1886	11	1881	17	9	2,719	1880	4,371	1889	1,064	1881	4,221	3,307
Pennsylvania:																
Philadelphia	274	1883	289	1888	264	1885	277	25	74,767	1883	79,022	1881	70,337	1886	74,837	8,685
Delaware:																
Delaware	25	1889	31	1882	19	1884	25	12	4,306	1884	6,291	1887	3,547	1888	4,207	2,744
Maryland:																
Baltimore	157	1884	172	1880	138	1887	157	34	49,543	1889	57,221	1881	38,459	1884	50,391	18,762
Annapolis	1	......	......	......	......	1883	1	......	91	1885	106	1883	45	1886	106	61
Eastern	3	1889	6	1880	1	1882	3	5	198	1889	444	1880	19	1886	208	425
District of Columbia:																
Georgetown	34	1881	38	1885	30	1887	34	8	8,281	1887	9,054	1880	6,851	1882	8,278	2,203
Virginia:																
Alexandria	12	1884	14	1886	10	1880	12	4	568	1881	756	1887	428	1884	566	328
Tappahannock	4	1882	5	1880	2	1881	4	3	240	1881	356	1884	92	1880	251	264
Yorktown	3	1886	4	1883	1	1884	3	3	571	1889	1,195	1883	57	1888	785	1,138
Richmond	17	1882	20	1885	15	1889	17	5	1,589	1884	2,091	1880	986	1888	1,304	1,105
Petersburg	3	1883	4	1882	1	1881	3	3	115	1884	210	1882	16	1881	74	194
Norfolk and Portsmouth	61	1889	70	1880	54	1883	63	16	5,222	1889	6,098	1881	4,679	1887	5,167	1,419
Cherrystone	3	1889	7	1882	2	1887	3	5	196	1889	706	1882	19	1887	196	687
North Carolina:																
Albemarle	27	1889	33	1880	21	1882	27	12	2,196	1888	2,461	1880	1,835	1885	2,194	626
Pamlico	15	1889	23	1880	6	1885	16	17	947	1889	1,424	1880	384	1883	932	1,040
Beaufort	2	1885	4	1883	1	1884	2	3	127	1885	197	1883	33	1884	152	164
Wilmington	16	1884	19	1886	13	1885	16	6	1,456	1884	1,926	1887	1,041	1881	1.438	885
South Carolina:																
Georgetown	12	1880	14	1881	8	1885	12	6	747	1889	1,017	1881	220	1883	706	797
Charleston	32	1885	34	1886	26	1881	32	8	5,191	1881	6,080	1882	4,258	1889	5,222	1,822
Beaufort	7	1887	11	1880	4	1884	6	7	462	1887	743	1881	196	1884	409	547
Georgia:																
Savannah	29	1885	36	1880	18	1883	31	18	19,411	1885	22,652	1880	10,504	1883	20,685	12,148
Brunswick	15	1889	25	1883	8	1881	14	17	1,488	1889	3,653	1883	691	1881	1,372	2,962
St. Mary	2	1880	3	1884	1	1881	2	2	90	1880	294	1884	34	1881	115	260
Florida:																
Fernandina	2	1881	3	1880	1	1882	2	2	252	1881	408	1880	24	1882	322	384
St. John	41	1886	52	1880	29	1887	41	23	3,500	1888	5,204	1881	2,024	1885	3,574	3,180
St. Augustine	4	1888	8	1880	1	1885	3	7	209	1888	391	1880	27	1889	194	364
Key West	14	1888	22	1881	9	1885	15	13	3,139	1886	4,005	1889	1,667	1880	3,243	2,338
St. Mark	8	1886	10	1883	5	1882	8	5	535	1885	919	1883	203	1884	563	716
Apalachicola	11	1888	15	1881	6	1884	11	9	1,360	1888	1,633	1881	1,157	1889	1,383	476
Pensacola	20	1889	23	1880	16	1881	20	7	1,658	1884	2,316	1880	1,155	1883	1,704	1,161
Tampa	12	......	......	......	......	......	......	......	693	......	......	......	......	......	......	......
Alabama:																
Mobile	48	1887	53	1884	41	1889	47	12	6,048	1882	7,209	1889	4,913	1887	6,150	2,296
Mississippi:																
Pearl River	11	1882	18	1888	7	1880	12	11	950	1889	1,872	1881	656	1884	919	1,216
Louisiana:																
New Orleans	24	1885	30	1880	21	1882	24	9	29,659	1885	32,741	1882	27,442	1887	20,009	5,299
Teche	30	1888	35	1881	26	1886	30	9	1,592	1888	2,197	1882	1,189	1883	1,570	1,008
Texas:																
Galveston	32	1889	35	1880	28	1888	32	7	3,269	1886	5,459	1888	2,573	1882	3,149	2,886
Corpus Christi	2	1883	2	1882	1	1884	2	1	152	1883	158	1882	112	1884	158	46
Brazos de Santiago	3	1880	4	......	......	1882	3	1	444	1880	995	1885	274	1882	448	721
Paso del Norte	2	......	......	......	......	1887	2	......	425	......	......	1889	424	1888	425	1

COMPARATIVE STATISTICS—Continued.

TABLE 35.—TONNAGE FLUCTUATIONS FOR THE 10 YEARS 1880-1889 (SAILING VESSELS)—AVERAGE ANNUAL NUMBER AND AVERAGE ANNUAL TONNAGE OF ALL SAILING VESSELS REGISTERED IN THE CUSTOMS DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE 10 YEARS 1880-1889, WITH THE YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Maine:																
Passamaquoddy	167	1880	186	1889	144	1884	171	42	15,892	1880	18,803	1887	13,155	1884	15,557	5,648
Machias	177	1885	191	1881	151	1883	176	40	17,142	1884	20,792	1882	14,325	1883	16,647	6,467
Frenchman Bay	231	1883	244	1889	214	1884	231	30	14,359	1886	15,509	1887	13,222	1882	14,457	2,287
Castine	264	1880	318	1886	231	1883	269	87	15,235	1880	19,057	1887	12,738	1885	14,458	6,319
Bangor	152	1884	170	1888	133	1881	152	37	23,568	1884	26,719	1888	20,307	1885	22,891	6,412
Belfast	217	1885	251	1889	147	1881	228	104	42,088	1884	51,520	1889	25,433	1886	41,263	26,087
Waldoboro	364	1880	411	1889	310	1884	368	101	75,651	1883	92,661	1889	50,139	1885	75,195	42,522
Wiscasset	139	1880	161	1889	96	1886	139	65	7,709	1880	9,713	1889	6.178	1883	7,600	3,535
Bath	236	1883	266	1889	183	1885	231	83	138,026	1884	168,631	1889	101,820	1881	137,373	66,811
Portland and Falmouth	324	1884	357	1889	265	1886	326	92	96,197	1881	111,536	1888	69,294	1886	93,026	42,242
Saco	15	1882	18	1889	9	1887	15	9	1,515	1884	2,273	1880	550	1881	1,454	1,723
Kennebunk	34	1880	43	1889	23	1883	36	20	5,230	1880	8,673	1889	2,838	1883	4,864	5,835
York	10	1885	13	1889	5	1886	10	8	337	1885	415	1889	208	1888	335	207
New Hampshire:																
Portsmouth	60	1880	69	1889	55	1885	59	14	9,668	1885	10,502	1883	8,649	1889	9,657	1,853
Massachusetts:																
Newburyport	41	1884	54	1889	17	1882	44	37	13,438	1884	17,907	1889	8,536	1880	12,328	9,371
Gloucester	478	1885	504	1889	453	1882	473	51	31,053	1885	33,734	1881	27,182	1883	31,162	6,552
Salem and Beverly	45	1880	64	1889	32	1883	45	32	3,755	1880	5,840	1884	1,741	1883	4,017	4,099
Marblehead	43	1880	61	1889	25	1884	42	36	2,461	1885	2,963	1881	1,775	1880	2,419	1,188
Boston and Charlestown	635	1882	733	1887	532	1885	627	201	219,055	1880	237,882	1889	186,908	1886	219.022	50,974
Plymouth	35	1880	49	1889	18	1885	34	31	1,754	1880	2,499	1888	956	1885	1,694	1,543
Barnstable	308	1880	339	1889	273	1886	306	66	28,423	1883	32,729	1889	21,503	1886	28,862	11,226
Nantucket	16	1889	20	1880	12	1883	15	8	379	1888	488	1880	226	1885	410	262
Edgartown	25	1889	33	1886	20	1880	24	13	1,325	1881	1,895	1888	935	1889	1,309	960
New Bedford	202	1880	250	1889	150	1885	197	100	35,317	1880	41.875	1889	27,226	1884	34,659	14,649
Fall River	80	1881	98	1889	58	1884	75	40	21,332	1888	26,148	1880	15,536	1884	21,401	10,612
Rhode Island:																
Providence	95	1882	115	1889	72	1880	95	43	12,309	1882	15,104	1889	8,590	1881	12,236	6,514
Newport	102	1880	123	1887	88	1885	101	35	3,587	1889	4,730	1883	2,840	1887	3,634	1.890
Bristol and Warren	25	1885	28	1889	22	1881	25	6	1,364	1882	1,752	1883	1,039	1885	1,386	713
Connecticut:																
Stonington	99	1880	115	1883	87	1882	99	28	5,208	1881	7,076	1889	3.988	1883	5,129	3,088
New London	131	1880	160	1889	114	1884	131	46	11,431	1889	15,607	1882	7,969	1885	11,821	7,638
Middletown	63	1880	77	1885	56	1882	66	21	6,422	1880	7,508	1885	5,938	1882	6,323	1,570
Hartford	41	1887	45	1889	39	1888	40	6	4,003	1887	4,801	1889	3,465	1888	3,744	1,336
New Haven	117	1881	146	1889	92	1884	115	54	18,680	1888	25,271	1882	14,322	1886	19,229	10,949
Fairfield	137	1882	157	1889	110	1885	135	47	5,689	1880	6,986	1883	5,171	1885	5,708	1,815
New York:																
New York	2,357	1881	2,499	1888	2,112	1885	2,437	387	484,666	1880	548,187	1888	400,191	1883	505,560	147,996
Sag Harbor	224	1881	260	1889	194	1884	221	66	10,830	1880	12,369	1889	7,981	1887	10,846	4,388
New Jersey:																
Newark	35	1884	44	1882	27	1888	34	17	2,579	1884	3,859	1881	1,508	1883	2,644	2,351
Perth Amboy	307	1883	357	1887	279	1889	307	78	15,606	1883	17,799	1884	14,481	1880	15,849	3,318
Little Egg Harbor	56	1880	71	1889	42	1884	59	29	4,190	1880	5,416	1889	2,679	1885	4,294	2,737
Great Egg Harbor	135	1889	165	1883	124	1882	136	41	16,534	1889	17,837	1883	14,348	1881	16,483	3,489
Bridgeton	380	1888	434	1880	311	1884	373	123	18,208	1885	20,259	1880	16,004	1889	17,767	4,255
Burlington	37	1880	50	1887	24	1886	32	26	2,654	1880	3,523	1887	1,595	1886	2,447	1,928
Pennsylvania:																
Philadelphia	559	1880	643	1889	484	1884	574	159	131,660	1886	143,162	1889	118,695	1880	132,089	24,467
Delaware:																
Delaware	158	1888	172	1882	144	1884	157	28	13,268	188[illegible]	15,142	1881	11,950	1888	13,409	3,192
Maryland:																
Baltimore	983	1885	1,083	1880	871	1889	990	212	61,649	1885	68,090	1889	55,425	1888	61,346	12,665
Annapolis	138	1884	162	1880	118	1888	144	44	2,799	1889	3,309	1880	2,262	1886	2,832	1,047
Eastern	792	1887	874	1880	656	1884	816	218	18,531	1885	20,103	1880	16,601	1882	18,120	3,502
District of Columbia:																
Georgetown	49	1889	71	1886	35	1882	49	36	1,980	1884	3,066	1886	937	1880	1,920	2,129
Virginia:																
Alexandria	71	1881	88	1887	56	1883	72	32	3,547	1884	5,386	1889	1,574	1888	3,892	3,812
Tappahannock	131	1885	145	1880	100	1884	128	45	3,262	1886	3,883	1880	2,418	1884	3,151	1,465
Yorktown	189	1887	219	1882	131	1883	201	88	3,735	1887	5,907	1881	1,994	1884	3,880	3,913
Richmond	42	1888	50	1880	21	1886	42	29	5,059	1885	8,035	1880	3,515	1887	4,845	4,520
Petersburg	2	1886	4	1880	1	1885	2	3	64	1882	262	1884	7	1886	45	255
Norfolk and Portsmouth	369	1882	411	1884	331	1881	367	80	10,584	1889	12,878	1888	8,620	1882	10,571	4,258
Cherrystone	338	1882	360	1884	283	1881	338	77	5,347	1888	5,807	1884	4,573	1883	5,341	1,234
North Carolina:																
Albemarle	48	1889	58	1883	39	1882	47	19	744	1881	954	1886	578	1887	696	376
Pamlico	104	1883	111	1886	98	1888	105	13	2,109	1883	2,522	1887	1,916	1884	2,104	606
Beaufort	85	1889	121	1881	65	1886	85	56	1,443	1889	2,012	1881	1,059	1885	1,434	953
Wilmington	54	1881	75	1889	32	1885	59	43	5,040	1884	7,543	1889	2,569	1880	4,879	4,974
South Carolina:																
Georgetown	8	1885	11	1881	3	1886	8	8	1,161	1885	1,826	1881	375	1887	1,203	1,451
Charleston	145	1882	158	1886	134	1883	141	24	3,729	1887	4,448	1888	2,713	1886	3,600	1,735
Beaufort	17	1883	21	1887	10	1880	17	11	706	1883	1,540	1887	209	1889	728	1,331

COMPARATIVE STATISTICS—Continued.

TABLE 35.—TONNAGE FLUCTUATIONS FOR THE 10 YEARS 1880-1889 (SAILING VESSELS)—Continued.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Georgia:																
Savannah	54	1881	61	1884	46	1880	54	15	3,864	1884	5,498	1887	2,119	1880	3,806	3,379
Brunswick	28	1884	38	1886	23	1880	28	15	5,869	1884	9,899	1888	4,022	1881	5,524	5,877
St. Mary	2	1880	4	1881	1	1882	2	3	456	1880	1,228	1881	7	1882	395	1,221
Florida:																
Fernandina	15	1880	17	1886	12	1884	15	5	3,512	1880	4,914	1883	2,845	1887	3,519	2,069
St. John	21	1889	27	1884	12	1883	20	15	2,099	1883	2,891	1884	522	1881	1,942	2,369
St. Augustine	6	1889	15	1880	1	1884	6	14	139	1884	301	1880	33	1887	133	268
Key West	148	1888	173	1881	134	1889	146	39	3,433	1888	3,886	1889	2,505	1881	3,388	1,381
St. Mark	33	1885	44	1881	13	1882	34	31	1,209	1883	2,976	1889	343	1881	1,186	2,633
Apalachicola	25	1886	28	1884	19	1880	25	9	1,182	1887	2,264	1881	255	1882	1,210	2,009
Pensacola	114	1885	128	1882	88	1886	114	40	10,925	1885	17,103	1882	6,844	1880	11,134	10,259
Tampa	25	......	......	......	......	......	......	......	236	......	......	......	......	......	......	......
Alabama:																
Mobile	79	1883	99	1887	63	1881	80	36	6,013	1881	9.338	1887	3,136	1889	4,986	6,202
Mississippi:																
Pearl River	133	1889	158	1880	119	1881	130	39	5,526	1889	9,268	1880	2,970	1883	5,187	6,298
Louisiana:																
New Orleans	337	1882	387	1889	287	1884	341	100	17,092	1880	29,928	1889	9,169	1884	16,506	20,759
Teche	69	1887	75	1883	56	1885	68	19	1,564	1880	2,030	1889	1,196	1884	1,689	834
Texas:																
Galveston	151	1883	163	1889	138	1884	151	25	4,886	1881	7,865	1885	3,572	1883	4,876	4,293
Saluria	24	1880	37	1889	11	1886	23	26	483	1880	838	1889	183	1884	548	655
Corpus Christi	30	1882	42	1888	22	1885	29	20	865	1882	1,796	1888	382	1887	843	1,414
Brazos de Santiago	[illegible]	1884	12	1888	4	1883	9	8	224	1884	458	1888	108	1880	227	350

COMPARATIVE STATISTICS—Continued.

TABLE **36.**—TONNAGE FLUCTUATIONS FOR THE 10 YEARS 1880–1889 (UNRIGGED CRAFT)—AVERAGE ANNUAL NUMBER AND AVERAGE ANNUAL TONNAGE OF ALL UNRIGGED CRAFT REGISTERED IN THE CUSTOMS DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE 10 YEARS 1880–1889, WITH THE YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Maine:																
Machias	1								122							
Bangor	1					1887	1		238					1887	238	
Waldoboro	1					1880	1		255					1880	255	
Bath	4	1888	12	1880	1	1886	4	11	2,928	1888	10,054	1880	151	1886	2,272	9,903
Massachusetts:																
Newburyport	2					1880	2		87					1880	87	
Gloucester	1					1888	1		122					1888	122	
Boston and Charlestown	13	1889	20	1887	4	1888	14	16	13,008	1889	19,610	1887	4,362	1888	15,053	15,248
Fall River	9	1883	10	1885	8	1880	9	2	3,571	1889	4,149	1885	2,884	1884	3,626	1,265
Rhode Island:																
Providence	3			1886	2	1887	3	1	957	1887	1,046	1886	689	1888	1,046	357
Connecticut:																
Stonington	1								482							
New London	14	1889	20	1880	3	1884	15	17	3,493	1889	5,571	1880	289	1885	3,839	5,282
Middletown	17	1886	21	1880	4	1882	19	17	3,348	1886	4,133	1880	641	1881	2,937	3,492
New Haven	113	1883	140	1881	63	1888	121	77	15,643	1883	19,660	1881	7,160	1888	16,828	12,500
Fairfield	2	1888	4	1881	1	1880	2	3	287	1888	570	1881	148	1887	297	422
Hartford	20	1889	22	1887	19	1888	20	3	4,136	1889	4,343	1887	3,860	1888	4,204	483
New York:																
New York	484	1889	631	1880	402	1886	476	229	96,727	1889	129,455	1880	79,196	1886	94,261	50,259
Sag Harbor	2	1880	3	1884	1	1883	2	2	1,433	1880	2,569	1884	781	1883	1,938	1,788
New Jersey:																
Perth Amboy	65	1882	99	1884	48	1888	63	51	16,705	1889	21,802	1880	10,661	1887	16,406	11,141
Burlington	6	1880	7	1889	1	1881	7	6	853	1880	1,029	1889	150	1881	1,029	879
Pennsylvania:																
Philadelphia	32	1889	46	1880	29	1885	32	17	6,765	1889	11,137	1880	4,822	1885	6,693	6,315
Delaware:																
Delaware	2					1880	2		357	1882	596	1880	117	1882	596	479
Maryland:																
Baltimore	8	1888	17	1881	3	1884	8	14	1,517	1888	3,241	1881	249	1889	1,391	2,992
Eastern	6								947							
District of Columbia:																
Georgetown	1	1887	2			1885	1	1	586	1887	742	1885	508	1886	508	234
Virginia:																
Yorktown	1					1880	1		429	1887	815	1880	43	1880	43	772
Richmond	2					1880	2		156					1880	156	
Tappahannock	1					1888	1		71					1888	71	
South Carolina:																
Beaufort	1								51							
Georgia:																
Savannah	2			1889	1	1888	2	1	593	1888	1,177	1889	9	1888	1,177	1,168
Florida:																
St. Mark	1								32							
Alabama:																
Mobile	8	1885	11	1880	4	1886	8	7	398	1887	538	1882	174	1889	413	364
Mississippi:																
Pearl River	19			1880	18	1881	19	1	1,235	1881	1,263	1880	1,180	1882	1,263	83
Louisiana:																
Teche	2								100							
Texas:																
Galveston	4	1887	6	1880	2	1882	4	4	718	1887	981	1885	367	1883	735	614
Corpus Christi	2					1884	2		223					1884	223	
Paso del Norte	1					1888	1		137			1889	136	1888	137	1

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—NUMBER AND TONNAGE OF ALL STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT BUILT IN THE CUSTOMS DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE 10 YEARS 1880-1889.

SUMMARY.

YEARS AND CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	6,727	1,148,350	1,610	418,684	4,562	618,705	555	110,961
1880	588	92,679	141	32,974	397	52,671	50	7,034
1881	636	112,535	185	41,394	406	60,890	45	10,251
1882	875	170,541	210	56,343	553	93,585	112	20,613
1883	873	192,689	189	65,078	631	119,060	53	8,551
1884	869	166,890	197	49,036	634	108,200	38	9,654
1885	643	109,657	155	44,017	465	59,332	23	6,308
1886	491	57,674	100	19,096	355	33,116	36	5,462
1887	538	73,676	123	38,972	371	24,252	44	10,452
1888	602	82,951	161	30,466	333	30,318	108	22,167
1889	612	89,058	149	41,308	417	37,281	46	10,469

1880

YEARS AND CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	588	92,679	141	32,974	397	52,671	50	7,034
Maine	90	37,165	12	1,155	78	36,010		
Passamaquoddy	1	33	1	33				
Machias	3	642			3	642		
Frenchman Bay	3	312			3	312		
Castine	7	802			7	802		
Bangor	2	96			2	96		
Belfast	7	2,930			7	2,930		
Waldoboro	8	5,064	2	97	6	4,967		
Wiscasset	3	164	1	139	2	25		
Bath	36	19,762	1	15	35	19,747		
Portland and Falmouth	10	4,784	3	496	7	4,288		
Kennebunk	10	2,576	4	375	6	2,201		
Massachusetts	36	3,819	7	1,274	29	2,545		
Newburyport	4	332	1	36	3	296		
Gloucester	7	713			7	713		
Marblehead	1	7			1	7		
Boston and Charlestown	17	2,726	6	1,238	11	1,488		
Nantucket	7	41			7	41		
Rhode Island	14	310	4	206	10	104		
Providence	5	173	1	131	4	42		
Bristol and Warren	3	75	3	75				
Newport	6	62			6	62		
Connecticut	44	5,080	3	653	10	1,276	31	3,151
Stonington	3	533	2	527	1	6		
New London	2	133	1	126	1	7		
Middletown	2	150			2	150		
New Haven	35	4,230			4	1,079	31	3,151
Fairfield	2	34			2	34		
New York	109	8,632	41	3,842	59	3,106	9	1,684
New York	102	7,877	40	3,831	53	2,362	9	1,684
Sag Harbor	7	755	1	11	6	744		
New Jersey	43	4,458	5	707	32	1,825	6	1,926
Newark	1	64			1	64		
Perth Amboy	12	2,564	3	677	4	47	5	1,840
Little Egg Harbor	6	65			6	65		
Great Egg Harbor	9	190	1	17	8	173		
Bridgeton	10	1,442			10	1,442		
Burlington	5	133	1	13	3	34	1	86
Pennsylvania: Philadelphia	43	21,295	28	16,958	15	4,337		
Delaware: Delaware	22	8,473	12	7,116	10	1,357		
Maryland	56	888	7	222	48	616	1	50
Baltimore	23	445	7	222	15	173	1	50
Annapolis	1	9			1	9		
Eastern	32	434			32	434		
District of Columbia: Georgetown	5	78	1	33	4	45		

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

1880—Continued.

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Virginia	31	436	1	40	30	396		
Alexandria	3	56			3	56		
Tappahannock	4	96			4	96		
Yorktown	6	48			6	48		
Cherrystone	6	92			6	92		
Norkfolk and Portsmouth	12	144	1	40	11	104		
North Carolina	15	434	10	312	5	122		
Albemarle	9	134	7	62	2	72		
Pamlico	5	217	2	167	3	50		
Wilmington	1	83	1	83				
South Carolina	13	212	3	94	10	118		
Georgetown	1	51	1	51				
Charleston	11	153	2	43	9	110		
Beaufort	1	8			1	8		
Georgia	7	115	2	45	5	70		
Savannah	5	68	1	27	4	41		
Brunswick	2	47	1	18	1	29		
Florida	17	362	2	112	15	250		
St. John	1	23			1	23		
St. Augustine	1	33			1	33		
Key West	6	96			6	96		
St. Mark	3	118	2	112	1	6		
Apalachicola	4	32			4	32		
Pensacola	2	60			2	60		
Alabama:								
Mobile	5	141	2	113	3	28		
Mississippi:								
Pearl River	9	358	1	92	6	82	2	184
Louisiana	19	278			18	239	1	39
New Orleans	16	202			16	202		
Teche	3	76			2	37	1	39
Texas	10	145			10	145		
Galveston	7	87			7	87		
Saluria	2	32			2	32		
Brazos de Santiago	1	26			1	26		

1881

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	636	112, 535	185	41, 394	406	60, 890	45	10, 251
Maine	102	42, 282	8	908	94	41, 374		
Passamaquoddy	1	10			1	10		
Machias	7	867			7	867		
Frenchman Bay	1	12	1	12				
Castine	4	1, 099			4	1, 099		
Bangor	6	888	2	27	4	861		
Belfast	6	3, 128			6	3, 128		
Waldoboro	8	4, 245			8	4, 245		
Wiscasset	9	640	2	311	7	329		
Bath	48	25, 977	3	558	45	25, 419		
Portland and Falmouth	8	4, 166			8	4, 166		
Kennebunk	4	1, 250			4	1, 250		
Vermont:								
Burlington	1	370	1	370				
Massachusetts	33	7, 168	7	2, 342	25	4, 723	1	103
Newburyport	4	39	2	23	2	16		
Gloucester	11	612			11	612		
Salem and Beverly	1	25			1	25		
Boston and Charlestown	11	6, 131	5	2, 319	6	3, 812		
Barnstable	2	223			2	223		
Nantucket	1	6			1	6		
New Bedford	1	8			1	8		
Fall River	2	124			1	21	1	103

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880–1889 (ALL VESSELS)—Continued.

1881—Continued.

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Rhode Island	16	149	5	67	11	82		
Providence	6	43			6	43		
Bristol and Warren	6	74	5	67	1	7		
Newport	4	32			4	32		
Connecticut	36	4,186	4	177	17	1,097	15	2,912
Stonington	2	12			2	12		
New London	7	252	2	102	5	150		
Middletown	7	1,401			3	36	4	1,365
New Haven	18	2,478	1	43	6	888	11	1,547
Fairfield	2	43	1	32	1	11		
New York	117	13,097	61	8,880	44	1,730	12	2,487
New York	113	13,029	61	8,880	40	1,662	12	2,487
Sag Harbor	4	68			4	68		
New Jersey	41	5,924	11	1,056	23	2,031	7	2,837
Newark	3	46	2	35	1	11		
Perth Amboy	22	3,882	8	982	7	63	7	2,837
Little Egg Harbor	1	22			1	22		
Great Egg Harbor	4	557			4	557		
Bridgeton	11	1,417	1	39	10	1,378		
Pennsylvania:								
Philadelphia	56	25,828	42	22,087	12	3,279	2	462
Delaware:								
Delaware	26	5,249	10	2,348	12	1,998	4	903
Maryland	54	1,953	4	488	50	1,465		
Baltimore	25	1,309	4	488	21	821		
Annapolis	2	57			2	57		
Eastern	27	587			27	587		
District of Columbia:								
Georgetown	1	10	1	10				
Virginia	38	1,463	3	119	33	996	2	348
Alexandria	2	685			2	685		
Tappahannock	5	32			5	32		
Richmond	1	13			1	13		
Yorktown	8	70			8	70		
Petersburg	1	43	1	43				
Cherrystone	9	95			9	95		
Norfolk and Portsmouth	12	525	2	76	8	101	2	348
North Carolina	17	632	6	122	9	311	2	199
Albemarle	5	49	5	49				
Pamlico	10	499	1	73	7	227	2	199
Wilmington	2	84			2	84		
South Carolina:								
Charleston	10	685	2	547	8	138		
Georgia	6	646	3	615	3	31		
Savannah	2	15			2	15		
Brunswick	4	631	3	615	1	16		
Florida	27	976	8	735	19	241		
St. John	6	268	3	212	3	56		
St. Augustine	1	13			1	13		
Key West	5	49			5	49		
St. Mark	2	92	2	92				
Apalachicola	5	371	2	342	3	29		
Pensacola	8	183	1	89	7	94		
Alabama:								
Mobile	7	431	4	342	3	89		
Mississippi:								
Pearl River	7	176			7	176		
Louisiana	31	573	3	142	28	431		
New Orleans	20	237			20	237		
Teche	11	336	3	142	8	194		

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880–1889 (ALL VESSELS)—Continued.

1881—Continued.

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Texas	10	737	2	39	8	698		
Galveston	6	633	2	39	4	594		
Saluria	3	87			3	87		
Corpus Christi	1	17			1	17		

1882

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	875	170, 541	210	56, 343	553	93, 585	112	20. 613
Maine	134	63, 205	14	1, 909	120	61, 296		
Passamaquoddy	5	200	2	168	3	32		
Machias	10	459	2	41	8	418		
Frenchman Bay	1	19	1	19				
Castine	5	638			5	638		
Bangor	6	991	3	177	3	814		
Belfast	12	5, 382			12	5, 382		
Waldoboro	20	10, 035	1	307	19	9, 728		
Wiscasset	6	1, 376			6	1, 376		
Bath	57	39, 451	3	1. 032	54	38, 419		
Portland and Falmouth	7	2, 421	2	165	5	2, 256		
Kennebunk	5	2, 233			5	2, 233		
Massachusetts	60	13, 773	10	2, 791	50	10, 982		
Newburyport	4	4, 100			4	4, 100		
Gloucester	22	1, 681			22	1, 681		
Salem and Beverly	1	10			1	10		
Marblehead	3	90			3	90		
Boston and Charlestown	25	7, 608	10	2, 791	15	4, 817		
Barnstable	2	259			2	259		
Nantucket	2	14			2	14		
Fall River	1	11			1	11		
Rhode Island	12	352	5	295	7	57		
Providence	7	111	1	61	6	50		
Bristol and Warren	4	234	4	234				
Newport	1	7			1	7		
Connecticut	98	16, 636	10	3, 313	18	2, 218	70	11, 105
Stonington	6	3, 071	2	2, 931	4	140		
New London	4	473			4	473		
Middletown	4	778			1	28	3	750
New Haven	77	12, 162	5	265	5	1, 542	67	10, 355
Fairfield	7	152	3	117	4	35		
New York	151	18, 667	61	10, 195	61	3, 641	29	4, 831
New York	143	17, 964	57	9, 518	57	3, 615	29	4, 831
Sag Harbor	8	703	4	677	4	26		
New Jersey	42	6, 409	8	536	29	3, 276	5	2, 597
Newark	3	220	3	220				
Perth Amboy	13	2, 865	2	159	6	109	5	2, 597
Little Egg Harbor	1	23			1	23		
Great Egg Harbor	7	1, 051			7	1, 051		
Bridgeton	15	2, 093			15	2, 093		
Burlington	3	157	3	157				
Pennsylvania: Philadelphia	55	28, 991	38	24, 470	14	4, 088	3	433
Delaware: Delaware	29	10, 559	14	7, 671	13	2, 292	2	596
Maryland	105	6, 089	12	2, 661	90	2, 377	3	1, 051
Baltimore	53	3, 614	11	2, 379	42	1, 235		
Eastern	52	2, 475	1	282	48	1, 142	3	1, 051
District of Columbia: Georgetown	5	93	2	58	3	35		
Virginia	42	869	6	255	36	614		
Alexandria	3	131			3	131		
Tappahannock	5	57			5	57		
Richmond	1	13	1	13				
Yorktown	6	48			6	48		
Cherrystone	11	247	3	61	8	186		
Norfolk and Portsmouth	16	373	2	181	14	192		

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

1882—Continued.

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
North Carolina	23	699	9	503	14	196		
Albemarle	6	107	3	34	3	73		
Pamlico	8	350	3	299	5	51		
Beaufort	6	72			6	72		
Wilmington	3	170	3	170				
South Carolina	11	1,157	3	1,024	8	133		
Georgetown	1	51	1	51				
Charleston	10	1,106	2	973	8	133		
Georgia	5	46	3	32	2	14		
Savannah	4	38	2	24	2	14		
Brunswick	1	8	1	8				
Florida	35	734	9	338	26	396		
Fernandina	2	75			2	75		
St. John	8	255	6	226	2	29		
Key West	12	127			12	127		
St. Mark	5	55			5	55		
Apalachicola	3	112	3	112				
Pensacola	5	110			5	110		
Alabama:								
Mobile	6	406			6	406		
Mississippi:								
Pearl River	21	510	1	27	20	483		
Louisiana	26	1,099	5	265	21	834		
New Orleans	17	228			17	228		
Teche	9	871	5	265	4	606		
Texas	15	247			15	247		
Galveston	10	147			10	147		
Saluria	2	27			2	27		
Corpus Christi	2	50			2	50		
Brazos de Santiago	1	23			1	23		

1883

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	873	192,689	189	65,078	631	119,060	53	8,551
Maine	179	79,295	14	7,153	165	72,142		
Passamaquoddy	2	94			2	94		
Machias	12	2,678			12	2,678		
Frenchman Bay	3	266	1	20	2	246		
Castine	3	1,140			3	1,140		
Bangor	6	1,351	2	328	4	1,023		
Belfast	17	6,979	1	11	16	6,968		
Waldoboro	26	13,602			26	13,602		
Wiscasset	19	3,604	1	40	18	3,564		
Bath	73	43,519	9	6,754	64	36,765		
Portland and Falmouth	14	5,658			14	5,658		
Kennebunk	4	404			4	404		
New Hampshire:								
Portsmouth	1	561			1	561		
Massachusetts	95	20,257	12	4,351	83	15,906		
Newburyport	10	7,445			10	7,445		
Gloucester	48	4,362	2	185	46	4,177		
Salem and Beverly	3	160			3	160		
Boston and Charlestown	28	8,151	10	4,166	18	3,985		
Barnstable	4	125			4	125		
Nantucket	1	6			1	6		
New Bedford	1	8			1	8		
Rhode Island	4	170	4	170				
Providence	2	105	2	105				
Bristol and Warren	1	38	1	38				
Newport	1	27	1	27				

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

1883—Continued.

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Connecticut	63	9,942	12	2,224	23	3,150	28	4,568
Stonington	15	2,538	8	2,079	6	76	1	383
New London	5	1,258	1	18	2	785	2	455
Middletown	5	608			2	177	3	431
New Haven	29	5,149	2	109	5	1,741	22	3,299
Fairfield	9	389	1	18	8	371		
New York	110	11,411	47	6,337	55	3,375	8	1,699
New York	104	10,880	47	6,337	49	2,844	8	1,699
Sag Harbor	6	531			6	531		
New Jersey	40	3,960	6	221	32	2,790	2	949
Newark	1	30	1	30				
Perth Amboy	11	1,168	3	132	6	87	2	949
Little Egg Harbor	2	32			2	32		
Great Egg Harbor	6	1,099	1	11	5	1,088		
Bridgeton	19	1,583			19	1,583		
Burlington	1	48	1	48				
Pennsylvania: Philadelphia	65	44,511	41	34,264	23	9,805	1	442
Delaware: Delaware	35	10,653	12	5,933	21	4,122	2	598
Maryland	111	4,748	6	1,359	105	3,389		
Baltimore	52	3,465	6	1,359	46	2,106		
Annapolis	1	33			1	33		
Eastern	58	1,250			58	1,250		
Virginia	35	2,981	5	501	30	2,480		
Alexandria	2	1,566			2	1,566		
Tappahannock	2	184			2	184		
Petersburg	2	50	1	37	1	13		
Yorktown	7	394			7	394		
Norfolk and Portsmouth	17	715	4	464	13	251		
Cherrystone	5	72			5	72		
North Carolina	27	595	8	359	19	236		
Albemarle	5	35	3	19	2	16		
Pamlico	9	359	4	317	5	42		
Beaufort	12	162	1	23	11	139		
Wilmington	1	39			1	39		
South Carolina	13	1,049	6	980	7	69		
Georgetown	2	316	2	316				
Charleston	10	725	4	664	6	61		
Beaufort	1	8			1	8		
Georgia: Savannah	3	48			3	48		
Florida	32	1,332	11	1,012	21	320		
St. John	8	392	7	370	1	22		
Key West	7	69			7	69		
St. Mark	5	143	1	105	4	38		
Apalachicola	2	523	2	523				
Pensacola	10	205	1	14	9	191		
Alabama: Mobile	18	428	1	76	5	57	12	295
Mississippi: Pearl River	10	174			10	174		
Louisiana	21	414	2	73	19	341		
New Orleans	13	233			13	233		
Teche	8	181	2	73	6	108		
Texas	11	160	2	65	9	95		
Galveston	8	132	2	65	6	67		
Saluria	2	16			2	16		
Corpus Christi	1	12			1	12		

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

1884.

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	869	166,890	197	49,036	634	108,200	38	9,654
Maine	140	65,691	11	2,702	129	62,989		
Passamaquoddy	1	486			1	486		
Machias	16	4,851			16	4,851		
Frenchman Bay	5	675			5	675		
Castine	4	61			4	61		
Bangor	6	1,433	1	45	5	1,388		
Belfast	12	7,326			12	7,326		
Waldoboro	25	11,491			25	11,491		
Wiscasset	7	1,107			7	1,107		
Bath	48	31,869	7	2,599	41	29,270		
Portland and Falmouth	11	4,348	3	58	8	4,290		
Kennebunk	5	2,044			5	2,044		
New Hampshire:								
Portsmouth	2	1,027			2	1,027		
Massachusetts	72	9,276	9	921	63	8,355		
Newburyport	3	1,743			3	1,743		
Gloucester	38	3,524			38	3,524		
Salem and Beverly	5	92			5	92		
Boston and Charlestown	15	3,186	8	894	7	2,292		
Plymouth	1	8			1	8		
Barnstable	1	290			1	290		
Nantucket	2	13			2	13		
Edgartown	2	34			2	34		
New Bedford	4	363	1	27	3	336		
Fall River	1	23			1	23		
Rhode Island	17	427	16	407	1	20		
Providence	5	142	5	142				
Bristol and Warren	6	231	6	231				
Newport	6	54	5	34	1	20		
Connecticut	29	7,627	9	430	14	4,567	6	2.630
Stonington	8	2,598	1	115	2	66	5	2,417
New London	3	577			3	577		
Middletown	5	668	2	55	2	400	1	213
New Haven	11	3,663	4	139	7	3,524		
Fairfield	2	121	2	121				
New York	129	15,637	50	8,564	64	3,852	15	3,221
New York	123	14,049	48	7,070	60	3,758	15	3,221
Sag Harbor	6	1,588	2	1,494	4	94		
New Jersey	61	9,061	2	135	51	7,007	8	1,919
Newark	2	130	1	59	1	71		
Perth Amboy	20	2,111	1	76	11	116	8	1,919
Little Egg Harbor	2	18			2	18		
Great Egg Harbor	13	3,600			13	3,600		
Bridgeton	23	3,180			23	3,180		
Burlington	1	22			1	22		
Pennsylvania:								
Philadelphia	50	30,336	35	23,046	11	6,074	4	1,216
Delaware:								
Delaware	35	12.557	12	7,669	23	4,888		
Maryland	147	6,752	11	1.536	132	4,582	4	634
Baltimore	69	5,106	10	1,454	55	3,018	4	634
Eastern	78	1,646	1	82	77	1,564		
District of Columbia:								
Georgetown	5	70	1	38	4	32		
Virginia	57	3,982	8	746	49	3,236		
Alexandria	10	2,383	3	173	7	2,210		
Tappahannock	3	81			3	81		
Richmond	2	150	1	72	1	78		
Petersburg	1	7			1	7		
Yorktown	14	557	1	17	13	540		
Norfolk and Portsmouth	15	615	3	484	12	131		
Cherrystone	12	189			12	180		

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

1884—Continued.

Customs districts.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
North Carolina	26	734	9	560	17	174		
Albemarle	8	250	4	218	4	32		
Pamlico	6	162	2	123	4	39		
Beaufort	10	169	1	66	9	103		
Wilmington	2	153	2	153				
South Carolina	8	438	4	348	4	90		
Georgetown	3	226	2	208	1	18		
Charleston	5	212	2	140	3	72		
Georgia	8	1,145	6	1,119	2	26		
Savannah	7	1,127	5	1,101	2	26		
Brunswick	1	18	1	18				
Florida	20	545	6	272	14	273		
Fernandina	1	8			1	8		
St. John	4	209	4	209				
St. Augustine	1	41	1	41				
Key West	6	76			6	76		
St. Mark	3	33			3	33		
Pensacola	5	178	1	22	4	156		
Alabama:								
Mobile	5	366	3	335	2	31		
Mississippi:								
Pearl River	16	600	3	177	13	423		
Louisiana	34	452	1	20	33	432		
New Orleans	25	341			25	341		
Teche	9	111	1	20	8	91		
Texas	8	167	1	11	6	122	1	34
Galveston	6	127	1	11	5	116		
Saluria	1	6			1	6		
Brazos de Santiago	1	34					1	34

1885

Customs districts.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	643	109,657	155	44,017	465	59,332	23	6,308
Maine	87	37,533	6	3,417	81	34,116		
Passamaquoddy	6	992	1	17	5	975		
Machias	12	2,309			12	2,309		
Frenchman Bay	1	53			1	53		
Castine	2	949			2	949		
Bangor	1	412			1	412		
Belfast	5	4,221			5	4,221		
Waldoboro	7	5,189			7	5,189		
Wiscasset	10	1,375			10	1,375		
Bath	31	20,345	5	3,400	26	16,945		
Portland and Falmouth	6	1,174			6	1,174		
Saco	1	9			1	9		
Kennebunk	5	505			5	505		
Massachusetts	45	6,769	2	21	43	6,748		
Newburyport	2	1,659			2	1,659		
Gloucester	28	2,462			28	2,462		
Salem and Beverly	4	39	2	21	2	18		
Boston and Charlestown	9	2,589			9	2,589		
New Bedford	2	20			2	20		
Rhode Island	10	204	6	156	4	48		
Providence	2	13	2	13				
Bristol and Warren	5	127	3	107	2	20		
Newport	3	64	1	36	2	28		
Connecticut	31	3,621	12	529	16	2,542	3	550
Stonington	10	460	3	129	7	331		
New London	2	259			1	20	1	239
Middletown	5	563	2	33	1	219	2	311
New Haven	9	2,150	4	197	5	1,953		
Fairfield	5	189	3	170	2	19		

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

1885—Continued.

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
New York	104	11,736	46	6,452	44	942	14	4,342
New York	98	11,584	43	6,408	41	834	14	4,342
Sag Harbor	6	152	3	44	3	108		
New Jersey	33	3,377	5	155	28	3,222		
Newark	3	60	2	37	1	23		
Perth Amboy	3	64			3	64		
Little Egg Harbor	3	86			3	86		
Great Egg Harbor	3	217			3	217		
Bridgeton	16	2,757			16	2,757		
Burlington	5	193	3	118	2	75		
Pennsylvania:								
Philadelphia	37	26,049	24	22,172	13	3,877		
Delaware:								
Delaware	28	10,620	15	6,956	11	2.889	2	775
Maryland	117	4,949	5	1,074	109	3,280	3	595
Baltimore	56	4,060	5	1,074	48	2,391	3	595
Eastern	61	889			61	889		
District of Columbia:								
Georgetown	3	26	2	18	1	8		
Virginia	26	324	1	18	25	306		
Alexandria	3	74			3	74		
Tappahannock	2	23			2	23		
Richmond	1	18	1	18				
Yorktown	3	23			3	23		
Norfolk and Portsmouth	13	132			13	132		
Cherrystone	4	54			4	54		
North Carolina	13	219	2	49	11	170		
Albemarle	2	15			2	15		
Pamlico	5	95	1	39	4	56		
Beaufort	3	37			3	37		
Wilmington	3	72	1	10	2	62		
South Carolina	13	675	3	456	10	219		
Georgetown	1	16			1	16		
Charleston	11	643	3	456	8	187		
Beaufort	1	16			1	16		
Georgia	10	694	3	606	7	88		
Savannah	9	651	2	563	7	88		
Brunswick	1	43	1	43				
Florida	42	1,692	15	1,250	27	442		
St. John	14	1,028	9	956	5	72		
Key West	10	215	3	118	7	97		
St. Mark	7	77			7	77		
Apalachicola	4	161	2	137	2	24		
Pensacola	7	211	1	39	6	172		
Alabama:								
Mobile	8	236	3	135	4	55	1	46
Mississippi:								
Pearl River	8	195	1	75	7	120		
Louisiana	19	304	2	122	17	182		
New Orleans	15	261	1	114	14	147		
Teche	4	43	1	8	3	35		
Texas:								
Galveston	9	434	2	356	7	78		

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880–1889 (ALL VESSELS)—Continued.

1886

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	491	57, 674	100	19, 096	365	33, 116	36	5, 462
Maine	55	23, 408	7	942	47	22, 251	1	215
Passamaquoddy	5	50	....	....	5	50	....	....
Machias	2	936	....	....	2	936	....	....
Frenchman Bay	2	103	....	....	2	103	....	....
Castine	2	77	....	....	2	77	....	....
Bangor	5	437	2	110	3	327	....	....
Belfast	3	2, 817	....	....	3	2, 817	....	....
Waldoboro	7	3, 608	....	....	7	3, 608	....	....
Wiscasset	5	488	2	225	3	263	....	....
Bath	23	14, 600	2	315	20	14, 070	1	215
Kennebunk	1	292	1	292	....	....	....	....
Massachusetts	30	1, 743	6	246	24	1, 497	....	....
Newburyport	1	13	....	....	1	13	....	....
Gloucester	18	1, 388	1	22	17	1, 366	....	....
Marblehead	2	13	....	....	2	13	....	....
Boston and Charlestown	5	294	4	208	1	86	....	....
Barnstable	2	13	....	....	2	13	....	....
New Bedford	1	6	....	....	1	6	....	....
Fall River	1	16	1	16	....	....	....	....
Rhode Island	4	77	1	52	3	25	....	....
Providence	2	12	....	....	2	12	....	....
Bristol and Warren	1	52	1	52	....	....	....	....
Newport	1	13	....	....	1	13	....	....
Connecticut	22	5, 396	9	3, 093	12	2, 155	1	148
Stonington	5	2, 624	1	2, 555	4	69	....	....
New London	2	242	....	....	2	242	....	....
Middletown	1	148	....	....	....	....	1	148
New Haven	7	2, 036	3	208	4	1, 828	....	....
Fairfield	7	346	5	330	2	16	....	....
New York	71	6, 357	29	3, 176	28	741	14	2, 440
New York	70	6, 334	29	3, 176	27	718	14	2, 440
Sag Harbor	1	23	....	....	1	23	....	....
New Jersey	43	2, 865	2	265	26	839	15	1, 761
Newark	1	176	1	176	....	....	....	....
Perth Amboy	18	1, 789	....	....	3	28	15	1, 761
Great Egg Harbor	2	451	....	....	2	451	....	....
Bridgeton	20	350	....	....	20	350	....	....
Burlington	2	99	1	89	1	10	....	....
Pennsylvania:								
Philadelphia	27	8, 434	19	6, 118	6	1, 861	2	455
Delaware:								
Delaware	7	2, 232	5	2, 150	2	82	....	....
Maryland	108	3, 752	4	2, 065	104	1, 687	....	....
Baltimore	59	3, 170	4	2, 065	55	1, 105	....	....
Annapolis	2	22	....	....	2	22	....	....
Eastern	47	560	....	....	47	560	....	....
District of Columbia:								
Georgetown	1	59	....	....	1	59	....	....
Virginia	26	836	2	40	24	796	....	....
Alexandria	4	616	....	....	4	616	....	....
Tappahannock	2	25	....	....	2	25	....	....
Petersburg	1	13	....	....	1	13	....	....
Yorktown	3	23	....	....	3	23	....	....
Norfolk and Portsmouth	12	134	2	40	10	94	....	....
Cherrystone	4	25	....	....	4	25	....	....
North Carolina	11	411	4	334	7	77	....	....
Albemarle	4	45	1	17	3	28	....	....
Pamlico	3	144	1	128	2	16	....	....
Beaufort	2	33	....	....	2	33	....	....
Wilmington	2	189	2	189	....	....	....	....
South Carolina:								
Charleston	6	91	....	....	6	91	....	....

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

1886—Continued.

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Georgia:								
Savannah	4	52			4	52		
Florida	29	582	8	304	21	278		
St. John	6	176	4	126	2	50		
Key West	8	161	1	33	7	128		
St. Mark	9	100	2	35	7	65		
Apalachicola	3	122	1	110	2	12		
Pensacola	3	23			3	23		
Alabama:								
Mobile	8	376	3	276	5	100		
Mississippi:								
Pearl River	13	243			13	243		
Louisiana	17	618	1	35	13	140	3	443
New Orleans	8	94			8	94		
Teche	9	524	1	35	5	46	3	443
Texas	9	142			9	142		
Galveston	8	136			8	136		
Saluria	1	6			1	6		

1887

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	538	73,676	123	38,972	371	24,252	44	10,452
Maine	48	16,570	5	728	42	15,720	1	122
Passamaquoddy	1	12			1	12		
Machias	7	190			6	968	1	122
Frenchman Bay	2	24			2	24		
Castine	2	22			2	22		
Belfast	2	1,869			2	1,869		
Waldoboro	6	1,740	1	35	5	1,705		
Wiscasset	7	999			7	999		
Bath	17	10,152	3	664	14	9,488		
Portland and Falmouth	3	652	1	29	2	623		
Kennebunk	1	10			1	10		
Massachusetts	25	4,983	3	2,827	22	2,156		
Newburyport	1	90			1	90		
Gloucester	17	1,484			17	1,484		
Salem and Beverly	1	39	1	39				
Boston and Charlestown	5	3,362	2	2,788	3	574		
Barnstable	1	8			1	8		
Rhode Island	7	109	2	52	5	57		
Providence	3	41			3	41		
Bristol and Warren	4	68	2	52	2	16		
Connecticut	21	2,373	4	138	15	1,335	2	900
Stonington	6	187			6	187		
New London	5	1,290	1	32	2	358	2	900
Hartford	2	29	2	29				
New Haven	3	761			3	761		
Fairfield	5	106	1	77	4	29		
New York:								
New York	147	14,590	44	6,172	69	1,253	34	7,165
New Jersey	42	2,532	5	240	32	537	5	1,755
Newark	3	31	1	9	2	22		
Perth Amboy	15	2,147	4	231	6	161	5	1,755
Little Egg Harbor	2	29			2	29		
Great Egg Harbor	8	87			8	87		
Bridgeton	13	230			13	230		
Burlington	1	8			1	8		
Pennsylvania:								
Philadelphia	31	23,189	20	22,155	9	524	2	510
Delaware:								
Delaware	20	4,638	10	4,101	10	537		

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

1887—Continued.

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Maryland	65	1,504	4	637	61	867	...	...
Baltimore	25	1,068	4	637	21	431	...	...
Annapolis	7	63	...	...	7	63	...	...
Eastern	33	373	...	...	33	373	...	...
District of Columbia:								
Georgetown	2	42	...	...	2	42	...	...
Virginia	27	542	2	276	25	266	...	...
Alexandria	1	18	1	18	...	...	...	...
Tappahannock	1	8	...	...	1	8	...	...
Richmond	1	7	...	...	1	7	...	...
Yorktown	5	44	...	...	5	44	...	...
Norfolk and Portsmouth	11	390	1	258	10	132	...	...
Cherrystone	8	75	...	...	8	75	...	...
North Carolina	21	695	7	579	14	116	...	...
Albemarle	2	18	1	9	1	9	...	...
Pamlico	4	261	2	244	2	17	...	...
Beaufort	11	90	...	...	11	90	...	...
Wilmington	4	326	4	326	...	...	...	...
South Carolina:								
Charleston	9	460	4	420	5	40	...	...
Georgia	3	298	1	283	2	15	...	...
Savannah	2	15	...	...	2	15	...	...
Brunswick	1	283	1	283	...	...	...	...
Florida	23	433	6	197	17	236	...	...
St. John	3	75	2	63	1	12	...	...
Key West	5	66	...	...	5	66	...	...
St. Mark	4	51	...	...	4	51	...	...
Apalachicola	3	45	1	32	2	13	...	...
Pensacola	8	196	3	102	5	94	...	...
Alabama:								
Mobile	5	95	3	80	2	15	...	...
Mississippi:								
Pearl River	11	173	...		11	173	...	...
Louisiana	26	365	2	65	24	300	...	...
New Orleans	12	188	...	...	12	188	...	...
Teche	14	177	2	65	12	112	...	...
Texas:								
Galveston	5	85	1	22	4	63	...	...

1888

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	602	82,951	161	30,466	333	30,318	108	22,167
Maine	52	20,724	9	2,555	43	18,169	...	...
Machias	3	88	...	...	3	88	...	...
Frenchman Bay	1	8	...	...	1	8	...	...
Castine	3	25	...	...	3	25	...	...
Belfast	3	3,166	...	...	3	3,166	...	...
Waldoboro	7	2,455	...	...	7	2,455	...	...
Wiscasset	2	177	...	...	2	177	...	...
Bath	27	14,511	5	2,284	22	12,227	...	...
Portland and Falmouth	3	219	2	204	1	15	...	...
Kennebunk	3	75	2	67	1	8	...	...
Massachusetts	55	4,174	10	1,430	45	2.744	...	...
Newburyport	4	92	3	81	1	11	...	...
Gloucester	18	1,560	1	65	17	1,495	...	...
Salem and Beverly	1	9	...	...	1	9	...	...
Boston and Charlestown	12	2,358	5	1,261	7	1,097	...	...
Plymouth	1	6	...	...	1	6	...	...
Barnstable	6	43	...	...	6	43	...	...
Nantucket	2	16	...	...	2	16	...	...
Edgartown	8	54	...	...	8	54	...	...
New Bedford	1	5	...	...	1	5	...	...
Fall River	2	31	1	23	1	8	...	...

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued

1888—Continued.

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Rhode Island	7	199	6	193	1	6	...	...
Providence	5	135	4	129	1	6	...	...
Bristol and Warren	2	64	2	64	...	...	...	...
Connecticut	36	8,716	9	795	15	4,575	12	3,346
Stonington	16	2,924	2	366	5	35	9	2,523
New London	6	2,561	1	34	4	2,222	1	305
Hartford	6	565	2	34	2	13	2	518
New Haven	4	2,447	1	148	3	2,299	...	...
Fairfield	4	219	3	213	1	6	...	...
New York	125	12,920	39	3,598	36	473	50	8,849
New York	120	12,778	39	3,598	31	331	50	8,849
Sag Harbor	5	142	...	...	5	142	...	...
New Jersey	74	9,285	9	570	32	394	33	8,321
Newark	24	4,211	2	109	2	26	20	4,076
Perth Amboy	15	4,374	2	129	...	...	13	4,245
Little Egg Harbor	3	184	2	177	1	7	...	...
Great Egg Harbor	14	124	...	...	14	124	...	...
Bridgeton	16	296	1	59	15	237	...	...
Burlington	2	96	2	96	...	...	...	...
Pennsylvania:								
Philadelphia	24	3,355	17	2,705	5	324	2	326
Delaware:								
Delaware	26	12,062	17	11,006	8	823	1	233
Maryland	58	5,303	7	2,961	42	1,259	9	1,083
Baltimore	23	4,777	6	2,866	8	828	9	1,083
Annapolis	2	37	...	...	2	37	...	...
Eastern	33	489	1	95	32	394	...	...
District of Columbia:								
Georgetown	2	65	1	24	1	41	...	...
Virginia	23	427	3	224	20	203	...	...
Tappahannock	3	25	...	...	3	25	...	...
Yorktown	4	43	...	...	4	43	...	...
Norfolk and Portsmouth	11	313	3	224	8	89	...	...
Cherrystone	5	46	...	...	5	46	...	...
North Carolina	31	761	10	507	21	257	...	...
Albemarle	6	96	4	80	2	16	...	...
Pamlico	10	354	4	290	6	64	...	...
Beaufort	11	139	1	55	10	84	...	...
Wilmington	4	175	1	82	3	93	...	...
South Carolina	10	106	3	43	7	63	...	...
Georgetown	1	8	...	...	1	8	...	...
Charleston	7	76	3	43	4	33	...	...
Beaufort	2	22	...	...	2	22	...	...
Georgia	9	3,181	7	3,157	1	15	1	9
Savannah	7	2,482	5	2,458	1	15	1	9
Brunswick	2	699	2	699	...	...	...	...
Florida	31	848	10	475	21	373	...	...
St. John	8	330	3	238	5	92	...	...
St. Augustine	5	95	3	76	2	19	...	...
Key West	4	131	1	90	3	41	...	...
St. Mark	1	6	...	...	1	6	...	...
Apalachicola	3	66	2	57	1	9	...	...
Pensacola	10	220	1	14	9	206	...	...
Alabama:								
Mobile	7	148	2	91	5	57	...	...
Mississippi:								
Pearl River	14	190	...	...	14	190	...	...
Louisiana	13	359	2	132	11	227	...	...
New Orleans	8	167	...	...	8	167	...	...
Teche	5	192	2	132	3	60	...	...
Texas:								
Galveston	5	125	...	...	5	125	...	...

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

1889

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	612	89,058	149	41,308	417	37,281	46	10,469
Maine	65	21,765	9	3,193	56	18,572		
Passamaquoddy	2	20			2	20		
Machias	8	1,077			8	1,077		
Frenchman Bay	1	21			1	21		
Castine	9	85			9	85		
Bangor	3	365	3	365				
Belfast	1	497			1	497		
Waldoboro	7	3,635			7	3,635		
Wiscasset	4	555			4	555		
Bath	28	15,488	5	2,815	23	12,673		
Portland and Falmouth	2	22	1	13	1	9		
Massachusetts	56	4,692	11	938	45	3,754		
Newburyport	2	84	1	71	1	13		
Gloucester	29	2,574			29	2,574		
Marblehead	1	48			1	48		
Boston and Charlestown	13	1,827	7	760	6	1,067		
Plymouth	1	6			1	6		
Barnstable	6	39			6	39		
Edgartown	2	23	1	16	1	7		
Fall River	2	91	2	91				
Rhode Island	11	492	5	393	6	99		
Providence	5	152	2	115	3	37		
Bristol and Warren	3	239	2	232	1	7		
Newport	3	101	1	46	2	55		
Connecticut	42	13,034	8	3,850	17	4,607	17	4,577
Stonington	19	6,133	4	3,495	9	163	6	2,475
New London	4	1,401	1	186	3	1,215		
Hartford	8	855	1	19			7	836
New Haven	10	4,639	2	150	4	3,223	4	1,266
Fairfield	1	6			1	6		
New York	112	9,658	39	4,166	52	1,407	21	4,085
New York	109	9,635	39	4,166	49	1,384	21	4,085
Sag Harbor	3	23			3	23		
New Jersey	38	2,580	11	860	24	865	3	855
Newark	1	317					1	317
Perth Amboy	15	1,365	8	777	5	50	2	538
Little Egg Harbor	2	64	1	52	1	12		
Great Egg Harbor	12	83			12	83		
Bridgeton	6	720			6	720		
Burlington	2	31	2	31				
Pennsylvania: Philadelphia	30	18,328	19	16,458	7	1,264	4	606
Delaware: Delaware	16	9,527	8	6,237	7	2,944	1	346
Maryland	71	4,231	6	2,188	65	2,043		
Baltimore	22	3,461	6	2,188	16	1,273		
Annapolis	5	77			5	77		
Eastern	44	693			44	693		
District of Columbia: Georgetown	25	372	2	88	23	284		
Virginia	30	493	2	174	28	319		
Alexandria	1	8			1	8		
Tappahannock	3	39			3	39		
Richmond	4	141	1	72	3	69		
Yorktown	5	48			5	48		
Norfolk and Portsmouth	8	170	1	102	7	68		
Cherrystone	9	87			9	87		
North Carolina	35	635	9	359	26	276		
Albemarle	6	191	3	162	3	29		
Pamlico	8	202	3	146	5	56		
Beaufort	16	166			16	166		
Wilmington	5	76	3	51	2	25		

COMPARATIVE STATISTICS—Continued.

TABLE 37.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (ALL VESSELS)—Continued.

1889—Continued.

CUSTOMS DISTRICTS.	Total.		Steamers.		Sailing vessels.		Unrigged craft.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
South Carolina	8	189	2	117	6	72	....	....
Georgetown	1	90	1	90	....	....	....	....
Charleston	7	99	1	27	6	72	....	....
Georgia	8	1,630	4	1,588	4	42	....	....
Savannah	5	789	1	747	4	42	....	....
Brunswick	3	841	3	841	....	....	....	....
Florida	29	624	5	200	24	424	....	....
St. John	1	63	....	....	1	63	....	....
St. Augustine	3	53	....	....	3	53	....	....
Key West	14	219	....	....	14	219	....	....
Tampa	1	9	1	9	....	....	....	....
St. Mark	3	28	2	22	1	6	....	....
Pensacola	7	252	2	169	5	83	....	....
Alabama:								
Mobile	4	162	1	116	3	46	....	....
Mississippi:								
Pearl River	10	205	2	139	8	66	....	....
Louisiana	12	280	3	144	9	136	....	....
New Orleans	6	89	....	....	6	89	....	....
Teche	6	191	3	144	3	47	....	....
Texas	10	161	3	100	7	61	....	....
Galveston	8	148	3	100	5	48	....	....
Corpus Christi	2	13	....	....	2	13	....	....

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (STEAMERS)—NUMBER AND TONNAGE OF ALL STEAMERS BUILT IN THE CUSTOMS DISTRICTS OF THE ATLANTIC COAST AND GULF OF MEXICO DURING THE 10 YEARS 1880-1889, CLASSIFIED AS PROPELLERS AND SIDE-WHEEL AND STERN-WHEEL STEAMERS.

SUMMARY.

YEARS AND CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	1,610	418,684	1,291	308,338	197	98,364	122	11,982
1880	141	32,974	103	23,964	29	8,076	9	934
1881	185	41,394	145	31,061	25	9,017	15	1,316
1882	210	56,343	169	38,601	27	16,622	14	1,120
1883	189	65,078	155	55,343	24	8,532	10	1,203
1884	197	49,036	169	42,479	11	4,328	17	2,229
1885	155	44,017	121	30,655	24	12,529	10	833
1886	100	19,096	85	12,809	8	5,929	7	358
1887	123	38,972	99	29,836	14	8,420	10	716
1888	161	30,466	128	17,601	18	11,231	15	1,634
1889	149	41,308	117	25,989	17	13,680	15	1,639

1880

YEARS AND CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	141	32,974	103	23,964	29	8,076	9	934
Maine	12	1,155	9	575	1	139	2	441
Passamaquoddy	1	33	1	33				
Waldoboro	2	97	2	97				
Wiscasset	1	139			1	139		
Bath	1	15	1	15				
Portland and Falmouth	3	496	1	55			2	441
Kennebunk	4	375	4	375				
Massachusetts	7	1,274	4	199	2	1,039	1	36
Newburyport	1	36					1	36
Boston and Charlestown	6	1,238	4	199	2	1,039		
Rhode Island	4	206	4	206				
Providence	1	131	1	131				
Bristol and Warren	3	75	3	75				
Connecticut	3	653	2	246	1	407		
Stonington	2	527	1	120	1	407		
New London	1	126	1	126				
New York	41	3,842	35	1,873	6	1,969		
New York	40	3,831	35	1,873	5	1,958		
Sag Harbor	1	11			1	11		
New Jersey	5	707	4	86	1	621		
Perth Amboy	3	677	2	56	1	621		
Great Egg Harbor	1	17	1	17				
Burlington	1	13	1	13				
Pennsylvania:								
Philadelphia	28	16,958	27	16,506	1	452		
Delaware:								
Delaware	12	7,116	5	3,864	7	3,252		
Maryland:								
Baltimore	7	222	7	222				
District of Columbia:								
Georgetown	1	33	1	33				
Virginia:								
Norfolk and Portsmouth	1	40	1	40				
North Carolina	10	312			7	62	3	250
Albemarle	7	62			7	62		
Pamlico	2	167					2	167
Wilmington	1	83					1	83
South Carolina	3	94	1	51	2	43		
Georgetown	1	51	1	51				
Charleston	2	43			2	43		

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING FOR THE 10 YEARS 1880–1889 (STEAMERS)—Continued.

1880—Continued.

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Georgia	2	45	2	45				
Savannah	1	27	1	27				
Brunswick	1	18	1	18				
Florida:								
St. Mark	2	112	1	18			1	94
Alabama:								
Mobile	2	113					2	113
Mississippi:								
Pearl River	1	92			1	92		
1881								
Total	185	41,394	145	31,061	25	9,017	15	1,316
Maine	8	908	6	597	2	311		
Frenchman Bay	1	12	1	12				
Bangor	2	27	2	27				
Wiscasset	2	311			2	311		
Bath	3	558	3	558				
Vermont:								
Burlington	1	370			1	370		
Massachusetts	7	2,342	7	2,342				
Newburyport	2	23	2	23				
Boston and Charlestown	5	2,319	5	2,319				
Rhode Island:								
Bristol and Warren	5	67	5	67				
Connecticut	4	177	3	82	1	95		
New London	2	102	1	7	1	95		
New Haven	1	43	1	43				
Fairfield	1	32	1	32				
New York:								
New York	61	8,880	58	6,360	3	2,520		
New Jersey	11	1,056	11	1,056				
Newark	2	35	2	35				
Perth Amboy	8	982	8	982				
Bridgeton	1	39	1	39				
Pennsylvania:								
Philadelphia	42	22,087	39	19,390	3	2,697		
Delaware:								
Delaware	10	2,348	6	458	3	1,700	1	190
Maryland:								
Baltimore	4	488	4	488				
District of Columbia:								
Georgetown	1	10	1	10				
Virginia	3	119	2	107			1	12
Petersburg	1	43	1	43				
Norfolk and Portsmouth	2	76	1	64			1	12
North Carolina	6	122			6	122		
Albemarle	5	49			5	49		
Pamlico	1	73			1	73		
South Carolina:								
Charleston	2	547	1	77	1	470		
Georgia:								
Brunswick	3	615			3	615		
Florida	8	735	1	11	1	56	6	668
St. John	3	212	1	11	1	56	1	145
St. Mark	2	92					2	92
Apalachicola	2	342					2	342
Pensacola	1	89					1	89

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING FOR THE 10 YEARS 1880–1889 (STEAMERS)—Continued.

1881—Continued.

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Alabama:								
Mobile	4	342	1	16			3	326
Louisiana:								
Teche	3	142			1	61	2	81
Texas:								
Galveston	2	39					2	39

1882

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	210	56,343	169	38,601	27	16,622	14	1,120
Maine	14	1,909	9	1,258	2	174	3	477
Passamaquoddy	2	168	1	26			1	142
Machias	2	41	1	13			1	28
Frenchman Bay	1	19			1	19		
Bangor	3	177	3	177				
Waldoboro	1	307					1	307
Bath	3	1,032	3	1,032				
Portland and Falmouth	2	165	1	10	1	155		
Massachusetts:								
Boston and Charlestown	10	2,791	7	756	3	2,035		
Rhode Island	5	295	5	295				
Providence	1	61	1	61				
Bristol and Warren	4	234	4	234				
Connecticut	10	3,313	8	403	2	2,910		
Stonington	2	2,931	1	43	1	2,888		
New Haven	5	265	4	243	1	22		
Fairfield	3	117	3	117				
New York	61	10,195	57	7,563	4	2,632		
New York	57	9,518	54	7,488	3	2,030		
Sag Harbor	4	677	3	75	1	602		
New Jersey	8	536	8	536				
Newark	3	220	3	220				
Perth Amboy	2	159	2	159				
Burlington	3	157	3	157				
Pennsylvania:								
Philadelphia	38	24,470	37	23,553	1	917		
Delaware:								
Delaware	14	7,671	7	2,033	7	5,638		
Maryland	12	2,661	11	1,452	1	1,209		
Baltimore	11	2,379	10	1,170	1	1,209		
Eastern	1	282	1	282				
District of Columbia:								
Georgetown	2	58	2	58				
Virginia	6	255	6	255				
Richmond	1	13	1	13				
Norfolk and Portsmouth	2	181	2	181				
Cherrystone	3	61	3	61				
North Carolina	9	503	2	205	3	34	4	264
Albemarle	3	34			3	34		
Pamlico	3	299	2	205			1	94
Wilmington	3	170					3	170
South Carolina	3	1,024			2	973	1	51
Georgetown	1	51					1	51
Charleston	2	973			2	973		
Georgia	3	32	3	32				
Savannah	2	24	2	24				
Brunswick	1	8	1	8				

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING FOR THE 10 YEARS 1880–1889 (STEAMERS)—Continued.

1882—Continued.

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Florida	9	338	6	175	2	100	1	63
St. John	6	226	3	63	2	100	1	63
Apalachicola	3	112	3	112				
Mississippi:								
Pearl River	1	27	1	27				
Louisiana:								
Teche	5	265					5	265

1883

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	189	65,078	155	55,343	24	8,532	10	1,203
Maine	14	7,153	14	7,153				
Frenchman Bay	1	20	1	20				
Bangor	2	328	2	328				
Belfast	1	11	1	11				
Wiscasset	1	40	1	40				
Bath	9	6,754	9	6,754				
Massachusetts	12	4,351	8	3,513	3	668	1	170
Gloucester	2	185	1	15			1	170
Boston and Charlestown	10	4,166	7	3,498	3	668		
Rhode Island	4	170	4	170				
Providence	2	105	2	105				
Bristol and Warren	1	38	1	38				
Newport	1	27	1	27				
Connecticut	12	2,224	11	2,054	1	170		
Stonington	8	2,079	7	1,909	1	170		
New London	1	18	1	18				
New Haven	2	109	2	109				
Fairfield	1	18	1	18				
New York:								
New York	47	6,337	40	2,368	6	3,904	1	65
New Jersey	6	221	6	221				
Newark	1	30	1	30				
Perth Amboy	3	132	3	132				
Great Egg Harbor	1	11	1	11				
Burlington	1	48	1	48				
Pennsylvania:								
Philadelphia	41	34,264	40	33,853	1	411		
Delaware:								
Delaware	12	5,933	9	3,739	3	2,194		
Maryland:								
Baltimore	6	1,359	6	1,359				
Virginia	5	501	4	376	1	125		
Petersburg	1	37	1	37				
Norfolk and Portsmouth	4	464	3	339	1	125		
North Carolina	8	359	4	151	3	19	1	189
Albemarle	3	19			3	19		
Pamlico	4	317	3	128			1	189
Beaufort	1	23	1	23				
South Carolina	6	980	1	83	4	860	1	37
Georgetown	2	316			1	279	1	37
Charleston	4	664	1	83	3	581		
Florida	11	1,012	6	270	1	105	4	637
St. John	7	370	5	256			2	114
St. Mark	1	105			1	105		
Apalachicola	2	523					2	523
Pensacola	1	14	1	14				

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING FOR THE 10 YEARS 1880–1889 (STEAMERS)—Continued.

1883—Continued.

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Alabama:								
Mobile	1	76			1	76		
Louisiana:								
Teche	2	73	1	12			1	61
Texas:								
Galveston	2	65	1	21			1	44

1884

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	197	49, 036	169	42, 479	11	4, 328	17	2, 229
Maine	11	2, 702	11	2, 702				
Bangor	1	45	1	45				
Bath	7	2, 599	7	2, 599				
Portland and Falmouth	3	58	3	58				
Massachusetts	9	921	8	850			1	71
Boston and Charlestown	8	894	7	823			1	71
New Bedford	1	27	1	27				
Rhode Island	16	407	16	407				
Providence	5	142	5	142				
Bristol and Warren	6	231	6	231				
Newport	5	34	5	34				
Connecticut	9	430	7	292	2	138		
Stonington	1	115			1	115		
Middletown	2	55	1	32	1	23		
New Haven	4	139	4	139				
Fairfield	2	121	2	121				
New York	50	8, 564	47	8, 172	2	360	1	32
New York	48	7, 070	45	6, 678	2	360	1	32
Sag Harbor	2	1, 494	2	1, 494				
New Jersey	2	135	2	135				
Newark	1	59	1	59				
Perth Amboy	1	76	1	76				
Pennsylvania:								
Philadelphia	35	23, 046	33	22, 090	1	883	1	73
Delaware:								
Delaware	12	7, 669	10	5, 827	2	1, 842		
Maryland	11	1, 536	10	689	1	847		
Baltimore	10	1, 454	9	607	1	847		
Eastern	1	82	1	82				
District of Columbia:								
Georgetown	1	38	1	38				
Virginia	8	746	7	473			1	273
Alexandria	3	173	3	173				
Richmond	1	72	1	72				
Yorktown	1	17	1	17				
Norfolk and Portsmouth	3	484	2	211			1	273
North Carolina	9	560	6	349	2	91	1	120
Albemarle	4	218	2	127	2	91		
Pamlico	2	123	2	123				
Beaufort	1	66	1	66				
Wilmington	2	153	1	33			1	120
South Carolina	4	348	2	140			2	208
Georgetown	2	208					2	208
Charleston	2	140	2	140				

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING—FOR THE 10 YEARS 1880-1889 (STEAMERS)—Continued.

1884—Continued.

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Georgia	6	1,119	1	18	1	167	4	934
Savannah	5	1,101			1	167	4	934
Brunswick	1	18	1	18				
Florida	6	272	3	89			3	183
St. John	4	209	2	67			2	142
St. Augustine	1	41					1	41
Pensacola	1	22	1	22				
Alabama:								
Mobile	3	335					3	335
Mississippi:								
Pearl River	3	177	3	177				
Louisiana:								
Teche	1	20	1	20				
Texas:								
Galveston	1	11	1	11				

1885

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	155	44,017	121	30,655	24	12,529	10	833
Maine	6	3,417	4	1,675	2	1,742		
Passamaquoddy	1	17	1	17				
Bath	5	3,400	3	1,658	2	1,742		
Massachusetts:								
Salem and Beverly	2	21	2	21				
Rhode Island	6	156	6	156				
Providence	2	13	2	13				
Bristol and Warren	3	107	3	107				
Newport	1	36	1	36				
Connecticut	12	529	11	516	1	13		
Stonington	3	129	3	129				
Middletown	2	33	1	20	1	13		
New Haven	4	197	4	197				
Fairfield	3	170	3	170				
New York	46	6,452	38	1,817	8	4,635		
New York	43	6,408	35	1,773	8	4,635		
Sag Harbor	3	44	3	44				
New Jersey	5	155	5	155				
Newark	2	37	2	37				
Burlington	3	118	3	118				
Pennsylvania:								
Philadelphia	24	22,172	23	22,032	1	140		
Delaware:								
Delaware	15	6,956	8	2,310	7	4,646		
Maryland:								
Baltimore	5	1,074	5	1,074				
District of Columbia:								
Georgetown	2	18	2	18				
Virginia:								
Richmond	1	18	1	18				
North Carolina	2	49	1	10	1	39		
Pamlico	1	39			1	39		
Wilmington	1	10	1	10				
South Carolina:								
Charleston	3	456	2	162	1	294		
Georgia	3	606	1	43	1	535	1	28
Savannah	2	563			1	535	1	28
Brunswick	1	43	1	43				

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (STEAMERS)—Continued.

1885—Continued.

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Florida	15	1,250	7	393	2	485	6	372
St. John	9	956	3	273	1	413	5	270
Key West	3	118	2	46	1	72		
Apalachicola	2	137	1	35			1	102
Pensacola	1	39	1	39				
Alabama:								
Mobile	3	135	1	46			2	89
Mississippi:								
Pearl River	1	75	1	75				
Louisiana	2	122	2	122				
New Orleans	1	114	1	114				
Teche	1	8	1	8				
Texas:								
Galveston	2	356	1	12			1	344

1886

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	100	19,096	85	12,809	8	5,929	7	358
Maine	7	942	6	763	1	179		
Bangor	2	110	2	110				
Wiscasset	2	225	1	46	1	179		
Bath	2	315	2	315				
Kennebunk	1	292	1	292				
Massachusetts	6	246	5	230	1	16		
Gloucester	1	22	1	22				
Boston and Charlestown	4	208	4	208				
Fall River	1	16			1	16		
Rhode Island:								
Bristol and Warren	1	52	1	52				
Connecticut	9	3,093	7	508	1	2,555	1	30
Stonington	1	2,555			1	2,555		
New Haven	3	208	2	178			1	30
Fairfield	5	330	5	330				
New York:								
New York	29	3,176	27	1,490	2	1,686		
New Jersey	2	265	2	265				
Newark	1	176	1	176				
Burlington	1	89	1	89				
Pennsylvania:								
Philadelphia	19	6,118	19	6,118				
Delaware:								
Delaware	5	2,150	3	674	2	1,476		
Maryland:								
Baltimore	4	2,065	4	2,065				
Virginia:								
Norfolk and Portsmouth	2	40	2	40				
North Carolina	4	334	2	230	1	17	1	87
Albemarle	1	17			1	17		
Pamlico	1	128	1	128				
Wilmington	2	189	1	102			1	87
Florida	8	304	3	63			5	241
St. John	4	126	3	63			1	63
Key West	1	33					1	33
St. Mark	2	35					2	35
Apalachicola	1	110					1	110
Alabama:								
Mobile	3	276	3	276				
Louisiana:								
Teche	1	35	1	35				

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING FOR THE 10 YEARS 1880–1889 (STEAMERS)—Continued.

1887

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	123	38,972	99	29,836	14	8,420	10	716
Maine	5	728	4	402	1	326		
Waldoboro	1	35	1	35				
Bath	3	664	2	338	1	326		
Portland and Falmouth	1	29	1	29				
Massachusetts	3	2,827	2	56	1	2,771		
Salem	1	39	1	39				
Boston and Charlestown	2	2,788	1	17	1	2,771		
Rhode Island:								
Bristol and Warren	2	52	2	52				
Connecticut	4	138	3	115	1	23		
New London	1	32	1	32				
Hartford	2	29	1	6	1	23		
Fairfield	1	77	1	77				
New York:								
New York	44	6,172	40	4,161	3	1,981	1	30
New Jersey	5	240	5	240				
Newark	1	9	1	9				
Perth Amboy	4	231	4	231				
Pennsylvania:								
Philadelphia	20	22,155	18	20,469	2	1,686		
Delaware:								
Delaware	10	4,101	7	3,531	1	353	2	217
Maryland:								
Baltimore	4	637	3	87	1	550		
Virginia	2	276	2	276				
Alexandria	1	18	1	18				
Norfolk and Portsmouth	1	258	1	258				
North Carolina	7	579	5	279			2	300
Albemarle	1	9	1	9				
Pamlico	2	244	2	244				
Wilmington	4	326	2	26			2	300
South Carolina:								
Charleston	4	420	2	29	2	391		
Georgia:								
Brunswick	1	283			1	283		
Florida	6	197	3	109			3	88
St. John	2	63	2	63				
Apalachicola	1	32					1	32
Pensacola	3	102	1	46			2	56
Alabama:								
Mobile	3	80	2	24	1	56		
Louisiana:								
Teche	2	65	1	6			1	59
Texas:								
Galveston	1	22					1	22

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING FOR THE 10 YEARS 1880-1889 (STEAMERS)—Continued.

1888

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	161	30,466	128	17,601	18	11,231	15	1,634
Maine	9	2,555	9	2,555				
Bath	5	2,284	5	2,284				
Portland and Falmouth	2	204	2	204				
Kennebunk	2	67	2	67				
Massachusetts	10	1,430	9	550	1	880		
Newburyport	3	81	3	81				
Gloucester	1	65	1	65				
Boston and Charlestown	5	1,261	4	381	1	880		
Fall River	1	23	1	23				
Rhode Island	6	193	6	193				
Providence	4	129	4	129				
Bristol and Warren	2	64	2	64				
Connecticut	9	795	6	403	2	244	1	148
Stonington	2	366	1	137	1	229		
New London	1	34	1	34				
Hartford	2	34	1	19	1	15		
New Haven	1	148					1	148
Fairfield	3	213	3	213				
New York:								
New York	39	3,598	36	2,104	3	1,494		
New Jersey	9	570	9	570				
Newark	2	109	2	109				
Perth Amboy	2	129	2	129				
Little Egg Harbor	2	177	2	177				
Bridgeton	1	59	1	59				
Burlington	2	96	2	96				
Pennsylvania:								
Philadelphia	17	2,705	17	2,705				
Delaware:								
Delaware	17	11,006	13	6,641	4	4,365		
Maryland	7	2,961	4	546	2	2,319	1	96
Baltimore	6	2,866	3	451	2	2,319	1	96
Eastern	1	95	1	95				
District of Columbia:								
Georgetown	1	24	1	24				
Virginia:								
Norfolk and Portsmouth	3	224	3	224				
North Carolina	10	507	6	346	2	24	2	137
Albemarle	4	80	2	56	2	24		
Pamlico	4	290	4	290				
Beaufort	1	55					1	55
Wilmington	1	82					1	82
South Carolina:								
Charleston	3	43	2	24			1	19
Georgia	7	3,157	2	607	3	1,851	2	699
Savannah	5	2,458	2	607	3	1,851		
Brunswick	2	699					2	699
Florida	10	475	5	109			5	366
St. John	3	238	2	53			1	185
St. Augustine	3	76	2	42			1	34
Key West	1	90					1	90
Apalachicola	2	57					2	57
Pensacola	1	14	1	14				
Alabama:								
Mobile	2	91					2	91
Louisiana:								
Teche	2	132			1	54	1	78

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING FOR THE 10 YEARS 1880–1889 (STEAMERS)—Continued.

1889

CUSTOMS DISTRICTS.	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	149	41, 308	117	25, 989	17	13, 680	15	1, 639
Maine	9	3, 193	8	1, 541	1	1, 652		
Bangor	3	365	3	365				
Bath	5	2, 815	4	1, 163	1	1, 652		
Portland and Falmouth	1	13	1	13				
Massachusetts	11	938	11	938				
Newburyport	1	71	1	71				
Boston and Charlestown	7	760	7	760				
Edgartown	1	16	1	16				
Fall River	2	91	2	91				
Rhode Island	5	393	4	349			1	44
Providence	2	115	1	71			1	44
Bristol and Warren	2	232	2	232				
Newport	1	46	1	46				
Connecticut	8	3, 850	6	414	2	3, 436		
Stonington	4	3, 495	3	95	1	3, 400		
New London	1	186	1	186				
Hartford	1	19	1	19				
New Haven	2	150	1	114	1	36		
New York:								
New York	39	4, 166	38	4, 106	1	60		
New Jersey	11	860	11	860				
Perth Amboy	8	777	8	777				
Little Egg Harbor	1	52	1	52				
Burlington	2	31	2	31				
Pennsylvania:								
Philadelphia	19	16, 458	18	11, 864	1	4, 594		
Delaware:								
Delaware	8	6, 237	5	4, 764	2	1, 308	1	165
Maryland:								
Baltimore	6	2, 188	5	601	1	1, 587		
District of Columbia:								
Georgetown	2	88	2	88				
Virginia	2	174	2	174				
Richmond	1	72	1	72				
Norfolk and Portsmouth	1	102	1	102				
North Carolina	9	359	3	113	3	47	3	199
Albemarle	3	162			2	19	1	143
Pamlico	3	146	2	97			1	49
Wilmington	3	51	1	16	1	28	1	7
South Carolina	2	117	1	27	1	90		
Georgetown	1	90			1	90		
Charleston	1	27	1	27				
Georgia	4	1, 588	1	11	1	747	2	830
Savannah	1	747			1	747		
Brunswick	3	841	1	11			2	830
Florida	5	200			1	9	4	191
Tampa	1	9			1	9		
St. Mark	2	22					2	22
Pensacola	2	169					2	169
Alabama:								
Mobile	1	116					1	116
Mississippi:								
Pearl River	2	139	2	139				
Louisiana:								
Teche	3	144			1	64	2	80
Texas:								
Galveston	3	100			2	86	1	14

CONGRESSIONAL APPROPRIATIONS.

TABLE 39.—CONGRESSIONAL APPROPRIATIONS FOR THE SURVEY, IMPROVEMENT, AND MAINTENANCE OF THE RIVERS AND HARBORS OF THE ATLANTIC COAST AND GULF OF MEXICO, BY PERIODS FROM THE EARLIEST DATE OF APPROPRIATION TO 1890, INCLUSIVE, BY LOCALITIES.

SUMMARY.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
Total	1821	$37, 480, 428	$33, 293, 406	$8, 808, 850	$79, 582, 684
Maine	1826	1, 305, 884	766, 250	418, 500	2, 490, 634
New Hampshire	1836	105, 000	214, 500	88, 000	407, 500
Massachusetts	1824	2, 657, 999	1, 668, 750	506, 500	4, 833, 249
Rhode Island	1827	577, 700	746, 250	215, 000	1, 538, 950
Connecticut	1821	1, 252, 777	1, 185, 550	325, 000	2, 763, 327
New York	1829	4, 304, 568	3, 881, 000	1, 100, 000	9, 285, 568
New Jersey	1829	551, 063	1, 166, 975	175, 000	1, 893, 038
Pennsylvania	1826	351, 100	344, 750	50, 000	745, 850
Delaware	1822	3, 168, 665	814, 500	128, 100	4, 111, 265
Maryland	1836	1, 355, 318	1, 750, 775	407, 500	3, 513, 593
District of Columbia	1833	501, 500	1, 825, 000	280, 000	2, 606, 500
Virginia	1829	1, 292, 580	1, 694, 800	508, 000	3, 495, 380
North Carolina	1826	1, 919, 059	1, 910, 250	440, 000	4, 269, 309
South Carolina	1836	550, 000	1, 895, 000	583, 000	3, 028, 000
Georgia (on the Atlantic)	1826	1, 120, 597	1, 285, 609	512, 500	2, 918, 706
Florida (on the Atlantic)	1829	146, 570	982, 000	240, 500	1, 369, 070
Florida (on the Gulf of Mexico)	1828	230, 280	579, 500	135, 500	945, 280
Georgia (*a*)	1874	23, 300	4, 000		27, 300
Alabama	1826	821, 752	1, 301, 750	524, 000	2, 647, 502
Mississippi	1827	76, 400	311, 125	60, 000	447, 525
Louisiana	1836	7, 767, 489	591, 647	220, 000	8, 579, 136
Texas	1852	1, 247, 200	4, 342, 500	893, 150	6, 482, 850
Miscellaneous	1828	1, 321, 500	3, 772, 350	998, 600	6, 092, 450
General appropriations	1841	4, 832, 127	258, 575		5, 030, 702

ATLANTIC COAST.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
MAINE	1826	1, 305, 884	766, 250	418, 500	2, 490, 634
Bagaduce river	1890			4, 000	4, 000
Bar Harbor (breakwater)	1888		50, 000	50, 000	100, 000
Bath gut	1870	33, 500			33, 500
	1880		7, 000		7, 000
	1881		5, 000		5, 000
Total for Bath gut	1870	33, 500	12, 000		45, 500
Belfast harbor	1826	23, 200			23, 200
	1880		3, 000		3, 000
	1890			10, 000	10, 000
Total for Belfast harbor	1826	23, 200	3, 000	10, 000	36, 200
Camden harbor	1873	30, 000			30, 000
	1888		5, 000		5, 000
	1890			6, 000	6, 000
Total for Camden harbor	1873	30, 000	5, 000	6, 000	41, 000
Cathance river	1880		10, 000		10. 000
	1881		6, 000		6, 000
	1882		5, 000		5, 000
Total for Cathance river	1880		21, 000		21, 000
Cobscook bay	1836	5, 300			5, 300
Harrissecket river	1890			10, 000	10, 000
Kennebec river	1827	145, 520			145, 520
	1890			50, 000	50, 000
Total for Kennebec river	1827	145, 520		50, 000	195, 520
Kennebunk river	1829	61, 175			61, 175
	1880		2, 000		2, 000
	1881		2, 000		2, 000
	1890			20, 000	20, 000
Total for Kennebunk river	1829	61, 175	4, 000	20, 000	85, 175

a Rivers emptying into other rivers which flow into the Gulf of Mexico.

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
MAINE—Continued.					
Lubec channel	1879	*a*$10,000			$10,000
	1880		$20,000		20,000
	1881		45,000		45,000
	1882		20,000		20,000
	1884		10,000		10,000
	1886		10,000		10,000
	1888		20,000		20,000
Total for Lubec channel	1879	10,000	125,000		135,000
Machias river	1873	32,000			32,000
Matinicus island	1873	1,000			1,000
Mooseabec bar	1881		10,000		10,000
	1882		10,000		10,000
	1884		10,000		10,000
	1886		10,000		10,000
	1888		15,000		15,000
	1890			$15,000	15,000
Total for Mooseabec bar	1881		55,000	15,000	70,000
Narraguagus river	1871	22,000			22,000
	1886		20,000		20,000
	1890			7,500	7,500
Total for Narraguagus river	1871	22,000	20,000	7,500	49,500
Owls Head harbor	1836	17,902			17,902
Penobscot river	1829	198,300			198,300
	1890			25,000	25,000
Total for Penobscot river	1829	198,300		25,000	223,300
Piscataqua river	1826	8,510			8,510
Portland harbor	1836	351,477			351,477
	1881		20,000		20,000
	1882		35,000		35,000
	1884		60,000		60,000
	1888		40,000		40,000
	1890			40,000	40,000
Portland harbor (Back cove)	1886		26,250		26,250
	1890			25,000	25,000
Total for Portland harbor	1836	351,477	181,250	65,000	597,727
Pleasant river	1890			3,500	3,500
Richmond harbor	1881		10,000		10,000
	1882		10,000		10,000
Total for Richmond harbor	1881		20,000		20,000
Richmond island	1852	114,000			114,000
	1880		3,000		3,000
	1881		3,000		3,000
Total for Richmond island	1852	114,000	6,000		120,000
Rockport harbor	1886		10,000		10,000
	1890			5,000	5,000
Total for Rockport harbor	1886		10,000	5,000	15,000
Rockland harbor	1880		20,000		20,000
	1882		40,000		40,000
	1884		40,000		40,000
	1886		22,500		22,500
	1888		30,000		30,000
	1890			37,500	37,500
Total for Rockland harbor	1880		152,500	37,500	190,000

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a In addition to the unexpended balance of the St. Croix river appropriation. See St. Croix river.

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
MAINE—Continued.					
Royal river	1871	$20,000			$20,000
	1882		$10,000		10,000
Total for Royal river	1871	20,000	10,000		30,000
Saco river breakwater	1866	40,000			40,000
	1884		15,000		15,000
	1886		12,500		12,500
	1888		12,500		12,500
	1890			$65,000	65,000
Total for Saco river breakwater	1866	40,000	40,000	65,000	145,000
Saco river	1827	87,000			87,000
	1886		12,500		12,500
	1888		10,000		10,000
Total for Saco river	1827	87,000	22,500		109,500
St. Croix river	1867	[a]35,000			35,000
	1881		4,000		4,000
	1890			[b]35,000	35,000
Total for St. Croix river	1867	35,000	4,000	35,000	74,000
Sullivan river	1871	35,000			35,000
Union river	1870	30,000			30,000
Wells harbor	1872	5,000			5,000
York harbor	1886		25,000		25,000
	1890			10,000	10,000
Total for York harbor	1886		25,000	10,000	35,000
NEW HAMPSHIRE	1836	105,000	214,500	88,000	407,500
Belamy river	1888		10,000		10,000
	1890			10,000	10,000
Total for Belamy river	1888		10,000	10,000	20,000
Cocheco river	1836	95,000			95,000
	1890			25,000	25,000
Total for Cocheco river	1836	95,000		25,000	120,000
Exeter river	1880		20,000		20,000
	1881		15,000		15,000
Total for Exeter river	1880		35,000		35,000
Lamprey river	1881		20,000		20,000
Little harbor (harbor of refuge)	1886		30,000		30,000
	1890			40,000	40,000
Total for Little harbor	1886		30,000	40,000	70,000
Portsmouth harbor	1879	10,000			10,000
	1880		25,000		25,000
	1881		20,000		20,000
	1882		17,000		17,000
	1884		20,000		20,000
	1886		30,000		30,000
	1890			13,000	13,000
Total for Portsmouth harbor	1879	10,000	112,000	13,000	135,000
Winnepesaukee lake	1880		5,000		5,000
	1881		2,500		2,500
Total for Winnepesaukee lake	1880		7,500		7,500

[a] Of this amount, $1,000 only were expended, the balance being transferred to the Lubec channel work March 3, 1879.

[b] Conditional on the Dominion of Canada expending a like sum.

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
MASSACHUSETTS	1824	$2, 657, 999	$1, 668, 750	$506, 500	$4, 833, 249
Bass river	1829	$20, 150			20, 150
Boston harbor	1825	1, 701, 526			1, 701, 526
	1880		75, 000		75, 000
	1881		100, 000		100, 000
	1882		96, 500		96, 500
	1884		5, 000		5, 000
	1886		67, 250		67, 250
	1888		125, 000		125, 000
	1890			150, 000	150, 000
Total for Boston harbor	1825	1, 701, 526	468, 750	150, 000	2, 320, 276
Duxbury harbor	1872	20, 000			20, 000
East Dennis breakwater	1852	1, 500			1, 500
Edgartown harbor	1826	23, 000			23, 000
	1890			2, 000	2, 000
Total for Edgartown harbor	1826	23, 000		2, 000	25, 000
Fall River harbor	1874	30, 000			30, 000
Gloucester harbor	1872	10, 000			10, 000
	1886		5, 000		5, 000
	1888		10, 000		10, 000
	1890			15, 000	15, 000
Total for Gloucester harbor	1872	10, 000	15, 000	15, 000	40, 000
Hyannis harbor	1827	118, 432			118, 432
	1881		5, 000		5, 000
	1886		20, 000		20, 000
	1890			8, 000	8, 000
Total for Hyannis harbor	1827	118, 432	25, 000	8, 000	151, 432
Ipswich river	1886		5, 000		5, 000
Lynn harbor	1882		76, 000		76, 000
	1890			15, 000	15, 000
Total for Lynn harbor	1882		76, 000	15, 000	91, 000
Malden river	1882		10, 000		10, 000
Manchester harbor	1886		2, 500		2, 500
	1890			5, 000	5, 000
Total for Manchester harbor	1886		2, 500	5, 000	7, 500
Marblehead harbor	1825	900			900
Merrimac river	1828	197, 367			197, 367
	1880		12, 000		12, 000
	1881		18, 000		18, 000
	1884		3, 500		3, 500
	1890			10, 000	10, 000
Total for Merrimac river	1828	197, 367	33, 500	10, 000	240, 867
Nantucket harbor	1828	45, 835			45, 835
	1880		50, 000		50, 000
	1881		50, 000		50, 000
	1884		10, 000		10, 000
	1886		15, 000		15, 000
	1888		20, 000		20, 000
	1890			25, 000	25, 000
Total for Nantucket harbor	1828	45, 835	145, 000	25, 000	215, 835
New Bedford harbor	1836	37, 691			37, 691
	1888		10, 000		10, 000
	1890			10, 000	10, 000
Total for New Bedford harbor	1836	37, 691	10, 000	10, 000	57, 691
Newburyport harbor	1880		50, 000		50, 000
	1881		120, 000		120, 000
	1886		37, 500		37, 500
	1888		25, 000		25, 000
	1890			25, 000	25, 000
Total for Newburyport harbor	1880		232, 500	25, 000	257, 500

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
MASSACHUSETTS—Continued.					
Plymouth beach and harbor	1824	$106, 267			$106, 267
	1880		$20, 000		20, 000
	1882		14, 000		14, 000
	1886		6, 000		6, 000
	1888		6, 000		6, 000
	1890			$8, 000	8, 000
Total for Plymouth beach and harbor	1824	106, 267	46, 000	8, 000	160, 267
Powow river	1888		3, 000		3, 000
	1890			5, 000	5, 000
Total for Powow river	1888		3, 000	5, 000	8, 000
Provincetown harbor	1826	121, 418			121, 418
	1880		500		500
	1881		10, 000		10, 000
	1884		2, 000		2, 000
	1886		3, 000		3, 000
	1888		7, 000		7, 000
	1890			7, 500	7, 500
Total for Provincetown harbor	1826	121, 418	22, 500	7, 500	151, 418
Salem harbor	1873	25, 000			25, 000
	1890			14, 000	14, 000
Total for Salem harbor	1873	25, 000		14, 000	39, 000
Sandy bay breakwater	1829	69, 233			69, 233
	1884		300, 000		300, 000
	1890			150, 000	150, 000
Total for Sandy bay breakwater	1829	69, 233	300, 000	150, 000	519, 233
Scituate harbor	1829	1, 180			1, 180
	1880		7, 500		7, 500
	1881		10, 000		10, 000
	1890			10, 000	10, 000
Total for Scituate harbor	1829	1, 180	17, 500	10, 000	28, 680
Stage harbor	1890			5, 000	5, 000
Taunton river	1870	66, 000			66, 000
	1880		17, 500		17, 500
	1881		50, 000		50, 000
	1884		26, 500		26, 500
	1890			7, 000	7, 000
Total for Taunton river	1870	66, 000	94, 000	7, 000	167, 000
Vineyard Haven harbor	1888		25, 000		25, 000
	1890			10, 000	10, 000
Total for Vineyard Haven harbor	1888		25, 000	10, 000	35, 000
Wareham harbor	1872	40, 000			40, 000
	1881		10, 000		10, 000
	1882		5, 000		5, 000
	1884		10, 000		10, 000
	1886		15, 000		15, 000
	1888		4, 000		4, 000
	1890			5, 000	5, 000
Total for Wareham harbor	1872	40, 000	44, 000	5, 000	89, 000
Wellfleet harbor	1872	5, 000			5, 000
	1890			4, 000	4, 000
Total for Wellfleet harbor	1872	5, 000		4, 000	9, 000
Westport harbor	1886		1, 000		1, 000
	1890			1, 000	1, 000
Total for Westport harbor	1836		1, 000	1, 000	2, 000
Weymouth river	1890			10, 000	10, 000
Winthrop harbor	1886		1, 000		1, 000
	1890			5, 000	5, 000
Total for Winthrop harbor	1886		1, 000	5, 000	6, 000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
MASSACHUSETTS—Continued.					
Woods Holl harbor	1852	$17,500			$17,500
	1882		$52,000		52,000
	1884		25,000		25,000
	1886		14,500		14,500
Total for Woods Holl harbor	1852	17,500	91,500		109,000
RHODE ISLAND	1827	577,700	746,250	$215,000	1,538,950
Block Island harbor	1870	285,000			285,000
	1880		6,000		6,000
	1882		19,000		19,000
	1884		15,000		15,000
	1886		20,000		20,000
	1888		15,000		15,000
	1890			15,000	15,000
Total for Block Island harbor	1870	285,000	75,000	15,000	375,000
Church cove	1827	28,200			28,200
Coaster harbor	1890			5,500	5,500
Greenwich bay	1890			2,000	2,000
Newport harbor	1873	28,500			28,500
	1881		92,000		92,000
	1890			12,500	12,500
Total for Newport harbor	1873	28,500	92,000	12,500	133,000
Pawtucket river	1867	52,000			52,000
	1884		115,000		115,000
	1890			30,000	30,000
Total for Pawtucket river	1867	52,000	115,000	30,000	197,000
Point Judith harbor	1890			75,000	75,000
Potowomut river	1881		5,000		5,000
Providence river and Green Jacket shoal	1890			25,000	25,000
Providence river and Narragansett bay	1852	174,000			174,000
	1880		60,000		60,000
	1881		60,000		60,000
	1882		125,000		125,000
	1884		85,000		85,000
	1886		56,250		56,250
	1888		68,000		68,000
	1890			50,000	50,000
Total for Providence river and Narragansett bay	1852	174,000	454,250	50,000	678,250
Warren river	1886		5,000		5,000
Wickford harbor	1873	10,000			10,000
CONNECTICUT	1821	1,252,777	1,185,550	325,000	2,763,327
Black Rock harbor	1884		35,000		35,000
	1890			5,000	5,000
Total for Black Rock harbor	1884		35,000	5,000	40,000
Bridgeport harbor	1836	175,000			175,000
	1880		10,000		10,000
	1881		10,000		10,000
	1882		10,000		10,000
	1884		5,000		5,000
	1886		20,000		20,000
	1888		10,000		10,000
	1890			20,000	20,000
Total for Bridgeport harbor	1836	175,000	65,000	20,000	260,000
Cedar Point beach	1836	1,000			1,000
Clinton harbor	1882		3,000		3,000
	1890			3,500	3,500
Total for Clinton harbor	1882		3,000	3,500	6,500

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
CONNECTICUT—Continued.					
Connecticut river	1870	$40,000			$40,000
Connecticut river above Hartford	1829	65,130			65,130
	1880		$15,000		15,000
Connecticut river below Hartford	1871	195,000			195,000
	1880		10,000		10,000
	1881		30,000		30,000
	1882		45,000		45,000
	1884		35,000		35,000
	1886		26,250		26,250
	1888		10,000		10,000
	1890			$12,500	12,500
Total for Connecticut river	1829	300,130	171,250	12,500	483,880
Duck Island harbor	1890			25,000	25,000
Five Mile river	1888		5,000	5,000	10,000
Housatonic river	1870	60,000			60,000
	1880		2,000		2,000
	1881		2,000		2,000
	1882		2,000		2,000
	1884		2,500		2,500
	1886		5,000		5,000
	1888		35,000		35,000
	1890			35,000	35,000
Total for Housatonic river	1870	60,000	48,500	35,000	143,500
Milford harbor	1874	28,000			28,000
	1880		5,000		5,000
	1882		5,000		5,000
	1888		5,000		5,000
	1890			2,500	2,500
Total for Milford harbor	1874	28,000	15,000	2,500	45,500
Mill river	1829	10,587			10,587
Mystic river	1890			10,000	10,000
New Haven breakwater	1879	30,000			30,000
	1880		30,000		30,000
	1881		60,000		60,000
	1882		60,000		60,000
	1884		40,000		40,000
	1886		75,000		75,000
	1888		75,000		75,000
	1890			120,000	120,000
Total for New Haven breakwater	1879	30,000	340,000	120,000	490,000
New Haven harbor	1872	171,000			171,000
	1880		15,000		15,000
	1881		15,000		15,000
	1882		30,000		30,000
	1884		10,000		10,000
	1886		20,000		20,000
	1888		15,000		15,000
	1890			15,000	15,000
Total for New Haven harbor	1872	171,000	105,000	15,000	291,000
New London	1880		19,800		19,800
Norwalk harbor	1829	53,080			53,080
	1880		5,000		5,000
	1881		5,000		5,000
	1882		5,000		5,000
	1884		5,000		5,000
	1886		3,000		3,000
	1888		28,000		28,000
	1890			4,000	4,000
Total for Norwalk harbor	1829	53,080	51,000	4,000	108,080
Saybrook harbor	1836	39,182			39,182
Southport harbor	1836	12,500			12,500
	1880		2,500		2,500
	1881		2,500		2,500
	1882		3,000		3,000
Total for Southport harbor	1836	12,500	8,000		20,500

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
CONNECTICUT—Continued.					
Stamford harbor	1829	$100			$100
	1886		$10. 000		10, 000
	1888		5, 000		5, 000
	1890			$5, 000	5, 000
Total for Stamford harbor	1829	100	15, 000	5, 000	20, 100
Stonington harbor	1827	184, 454			184, 454
	1880		25, 000		25, 000
	1881		30, 000		30, 000
	1882		25, 000		25, 000
	1884		10, 000		10, 000
	1886		20, 000		20, 000
	1888		8, 000		8, 000
	1890			12, 500	12, 500
Total for Stonington harbor	1827	184, 454	118, 000	12, 500	314, 954
Thames river	1821	169, 300			169, 300
	1880		22, 500		22, 500
	1881		30, 000		30, 000
	1882		35, 000		35, 000
	1884		25, 000		25, 000
	1886		22, 500		22, 500
	1888		50, 000		50, 000
	1890			20, 000	20, 000
Total for Thames river	1821	169, 300	185, 000	20, 000	374, 300
Westport harbor (Saugatuck)	1826	18, 444			18, 444
	1886		1, 000		1, 000
Total for Westport harbor	1826	18, 444	1, 000		19, 444
Wilson Point harbor	1890			30, 000	30, 000
NEW YORK	1829	4, 304, 568	3, 881, 000	1, 100, 000	9 285, 568
Brown creek	1890			12, 000	12, 000
Canarsie bay	1880		10, 000		10, 000
	1881		5, 000		5, 000
	1882		3, 000		3, 000
	1884		5, 000		5, 000
	1886		10, 000		10, 000
	1888		10, 000		10, 000
	1890			5, 000	5, 000
Total for Canarsie bay	1880		43, 000	5, 000	48, 000
East Chester creek	1873	50, 500			50, 500
	1880		3, 500		3, 500
	1886		10, 000		10, 000
	1888		5, 000		5, 000
Total for East Chester creek	1873	50, 500	18, 500		69, 000
East river and Hell Gate	1852	2, 295, 000			2, 295, 000
	1880		200, 000		200, 000
	1881		200, 000		200. 000
	1882		250, 000		250, 000
	1884		360, 000		360, 000
	1886		112, 500		112, 500
	1888		250, 000		250, 000
	1890			200, 000	200, 000
Total for East river and Hell Gate	1852	2, 295, 000	1, 372, 500	200, 000	3, 867, 500
Echo harbor	1878	13, 000			13, 000
	1880		3, 000		3, 000
	1881		3, 000		3, 000
	1882		3, 000		3, 000
Total for Echo harbor	1878	13, 000	9, 000		22, 000
Flushing bay	1879	20, 000			20, 000
	1880		15, 000		15, 000
	1881		10, 000		10, 000
	1882		5, 000		5, 000
	1884		10, 000		10, 000
	1886		10, 000		10, 000
	1888		15, 000		15. 000
	1890			20, 000	20, 000
Total for Flushing bay	1879	20, 000	65, 000	20, 000	105, 000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
NEW YORK—Continued.					
Glen Cove harbor	1888		$20,000		$20,000
	1890			$15,000	15,000
Total for Glen Cove harbor	1888		20,000	15,000	35,000
Gowanus bay	1881		40,000		40,000
	1882		20,000		20,000
	1883		5,000		5,000
	1886		7,500		7,500
	1888		60,000		60,000
	1890			160,000	160,000
Total for Gowanus bay	1881		132,500	160,000	292,500
Greenport harbor	1882		10,000		10,000
	1884		10,000		10,000
	1886		5,000		5,000
	1888		5,000		5,000
	1890			5,000	5,000
Total for Greenport harbor	1882		30,000	5,000	35,000
Harlem river	1875	$410,000			410,000
	1888		70,000		70,000
	1890			250,000	250,000
Total for Harlem river	1875	410,000	70,000	250,000	730,000
Hudson river	1834	1,190,188			1,190,188
	1880		20,000		20,000
	1881		15,000		15,000
	1882		10,000		10,000
	1884		30,000		30,000
	1886		26,250		26,250
	1888		75,000		75,000
	1890			150,000	150,000
Total for Hudson river	1834	1,190,188	176,250	150,000	1,516,438
Huntington harbor	1872	22,500			22,500
	1890			10,000	10,000
Total for Huntington harbor	1872	22,500		10,000	32,500
Larchmont harbor	1890			5,000	5,000
Mamaroneck harbor	1882		15,000		15,000
New Rochelle harbor	1881		20,000		20,000
	1882		15,000		15,000
Total for New Rochelle harbor	1881		35,000		35,000
Newtown creek	1880		10,000		10,000
	1882		15,000		15,000
	1884		20,000		20,000
	1886		37,500		37,500
	1888		25,000		25,000
	1890			35,000	35,000
Total for Newtown creek	1880		107,500	35,000	142,500
New York harbor:					
Buttermilk channel	1880		60,000		60,000
	1881		60,000		60,000
	1882		60,000		60,000
	1884		10,000		10,000
	1886		56,250		56,250
	1888		100,000		100,000
Gedney and Main Ship channel	1884		200,000		200,000
	1886		750,000		750,000
	1888		380,000		380,000
	1890			160,000	160,000
Sandy Hook channel	1868	116,530			116,530
Staten Island icebreaker	1836	19,500			19,500
Total for New York harbor	1836	136,030	1,676,250	160,000	1,972,280
Patchogue river	1890			15,000	15,000
Port Chester harbor	1872	12,000			12,000
	1882		15,000		15,000
	1888		5,000		5,000
	1890			5,000	5,000
Total for Port Chester harbor	1872	12,000	20,000	5,000	37,000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
NEW YORK—Continued.					
Port Jefferson harbor	1852	$65, 200			$65, 200
	1880		$3, 000		3, 000
	1881		4, 000		4, 000
	1882		8, 000		8, 000
	1890			$25, 000	25, 000
Total for Port Jefferson harbor	1852	65, 200	15, 000	25, 000	105, 200
Rondout harbor	1872	90, 000			90, 000
	1882		2, 000		2, 000
	1884		1, 000		1, 000
	1886		2, 500		2, 500
	1888		5, 000		5, 000
	1890			5, 000	5, 000
Total for Rondout harbor	1872	90, 000	10, 500	5, 000	105, 500
Sag harbor	1829	150			150
Saugerties harbor	1884		5, 000		5, 000
	1886		15, 000		15, 000
	1888		12, 000		12, 000
	1890			10, 000	10, 000
Total for Saugerties harbor	1884		32, 000	10, 000	42, 000
Sheepshead bay	1880		3, 000		3, 000
	1881		5, 000		5, 000
	1882		3, 000		3, 000
	1884		5, 000		5, 000
	1886		5, 000		5, 000
	1888		5, 000		5, 000
Total for Sheepshead bay	1880		26, 000		26, 000
Sumpawamus bay	1881		5, 000		5, 000
	1882		2, 000		2, 000
Total for Sumpawamus bay	1881		7, 000		7, 000
Wappinger creek	1890			13, 000	13, 000
NEW JERSEY	1829	551, 063	1, 166, 975	175, 000	1, 893, 038
Alloway creek	1890			6, 000	6, 000
Atlantic City harbor	1886		5, 000		5, 000
Cheesequake creek	1880		20, 000		20, 000
	1881		5, 000		5, 000
	1882		15, 000		15, 000
Total for Cheesequake creek	1880		40, 000		40, 000
Cohansey creek	1873	19, 500			19, 500
	1880		4, 500		4, 500
	1881		7, 000		7, 000
	1882		5, 000		5, 000
Total for Cohansey creek	1873	19, 500	16, 500		36, 000
Cranberry inlet	1852	1, 000			1, 000
Elizabeth river	1879	7, 500			7, 500
	1880		7, 500		7, 500
	1881		4, 000		4, 000
	1882		8, 000		8, 000
	1890			5, 000	5, 000
Total for Elizabeth river	1879	7, 500	19, 500	5, 000	32, 000
Flat Beach	1829	100			100
Keyport harbor	1882		30,475		30, 475
Little Egg Harbor	1836	23, 500			23, 500
Manasquan river	1879	12, 000			12, 000
	1880		20, 000		20, 000
	1882		7, 000		7, 000
Total for Manasquan river	1879	12, 000	27, 000		39, 000
Mantua creek	1882		3, 000		3, 000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
NEW JERSEY—Continued.					
Mattawan creek	1882		$21,000		$21,000
	1890			$2,500	2,500
Total for Mattawan creek	1882		21,000	2,500	23,500
Maurice river	1882		3,000		3,000
	1884		17,000		17,000
	1886		5,000		5,000
	1888		10,000		10,000
	1890			8,000	8,000
Total for Maurice river	1882		35,000	8,000	43,000
Newark bay	1852	$12,000			12,000
New Brunswick harbor	1836	13,963			13,963
Passaic river above Newark	1872	112,000			112,000
	1880		2,000		2,000
	1882		7,000		7,000
	1884		3,000		3,000
	1886		2,250		2,250
	1888		7,500		7,500
	1890			41,500	41,500
Passaic river below Newark	1880		30,000		30,000
	1881		50,000		50,000
	1882		43,000		43,000
	1884		25,000		25,000
	1886		24,000		24,000
	1888		27,500		27,500
Total for Passaic river	1872	112,000	221,250	41,500	374,750
Raccoon river	1882		3,000		3,000
Rahway river	1879	10,000			10,000
	1880		10,000		10,000
	1881		10,000		10,000
	1882		7,000		7,000
Total for Rahway river	1879	10,000	27,000		37,000
Rancocas river	1881		10,000		10,000
	1882		10,000		10,000
Total for Rancocas river	1881		20,000		20,000
Raritan bay	1881		50,000		50,000
	1882		50,000		50,000
	1884		20,000		20,000
	1886		37,500		37,500
	1888		25,000		25,000
	1890			40,000	40,000
Total for Raritan bay	1881		182,500	40,000	222,500
Raritan river	1878	260,000			260,000
	1880		100,000		100,000
	1881		25,000		25,000
	1882		25,000		25,000
	1884		35,000		35,000
	1886		26,250		26,250
	1888		50,000		50,000
	1890			50,000	50,000
Total for Raritan river	1878	260,000	261,250	50,000	571,250
Salem river	1871	7,000			7,000
	1880		3,000		3,000
	1881		3,000		3,000
	1882		1,500		1,500
Total for Salem river	1871	7,000	7,500		14,500
Shoal harbor	1890			5,000	5,000
Shrewsbury river	1852	48,500			48,500
	1880		30,000		30,000
	1881		86,000		86,000
	1882		30,000		30,000
	1886		10,000		10,000
	1888		10,000		10,000
	1890			10,000	10,000
Total for Shrewsbury river	1852	48,500	166,000	10,000	224,500

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
NEW JERSEY—Continued.					
South river	1871	$20,000			$20,000
	1880		$40,000		40,000
	1881		6,000		6,000
	1882		10,000		10,000
	1886		5,000		5,000
	1888		5,000		5,000
	1890			$5,000	5,000
Total for South river	1871	20,000	66,000	5,000	91,000
Squan river	1890			2,000	2,000
Woodbridge creek	1879	4,000			4,000
	1880		5,000		5,000
	1881		5,000		5,000
	1882		5,000		5,000
Total for Woodbridge creek	1879	4,000	15,000		19,000
PENNSYLVANIA	1826	351,100	344,750	50,000	745,850
Chester harbor and creek	1826	27,100			27,100
	1881		3,000		3,000
	1882		3,000		3,000
Total for Chester harbor and creek	1826	27,100	6,000		33,100
Frankford creek	1882		10,000		10,000
Marcus Hook harbor	1829	104,000			104,000
	1880		35,000		35,000
	1881		30,000		30,000
	1882		15,000		15,000
	1886		15,000		15,000
	1888		15,000		15,000
	1890			5,000	5,000
Total for Marcus Hook harbor	1829	104,000	110,000	5,000	219,000
Schuylkill river	1870	220,000			220,000
	1880		40,000		40,000
	1881		40,000		40,000
	1882		25,000		25,000
	1884		25,000		25,000
	1886		18,750		18,750
	1888		25,000		25,000
	1890			45,000	45,000
Total for Schuylkill river	1870	220,000	173,750	45,000	438,750
Susquehanna river (North branch)	1880		15,000		15,000
	1881		15,000		15,000
	1882		15,000		15,000
Total for Susquehanna river	1880		[a]45,000		45,000
DELAWARE	1822	3,168,665	814,500	128,100	4,111,265
Appoquinnimink creek	1890			5,000	5,000
Broad creek	1880		5,000		5,000
	1881		10,000		10,000
	1882		5,000		5,000
	1886		10,000		10,000
	1888		5,000		5,000
Total for Broad creek	1880		35,000		35,000
Broadkiln river	1873	10,000			10,000
	1880		5,000		5,000
	1881		5,000		5,000
	1882		5,000		5,000
	1888		10,000		10,000
Total for Broadkiln river	1873	10,000	25,000		35,000
Chesapeake and Delaware ship canal	1873	[b]15,000			15,000
	1882		[b]10,000		10,000
Total for Chesapeake and Delaware ship canal	1873	15,000	10,000		25,000

[a] See Maryland.

[b] For survey. The cost of canal has been variously estimated at from $7,000,605 to $41,500,000.

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
DELAWARE—Continued.					
Delaware bay and harbor:					
Breakwater	1822	$2, 392, 104			$2, 392, 104
	1880		$25, 000		25, 000
	1882		125, 000		125, 000
	1884		75, 000		75. 000
	1886		56, 250		56, 250
	1888		100, 000		100, 000
	1890			$80, 000	80, 000
Ice harbor	1882		25, 000		25, 000
Lewes pier	1870	335, 500			335, 500
	1880		10, 000		10, 000
	1881		10, 000		10, 000
	1882		13, 000		13, 000
Total for Delaware bay and harbor	1822	2, 727, 604	439, 250	80, 000	3, 246, 854
Duck creek	1880		5, 000		5, 000
	1881		3, 000		3, 000
	1882		2, 000		2, 000
	1888		10, 000		10, 000
Total for Duck creek	1880		20, 000		20, 000
Indian river	1882		10, 000		10, 000
Jones river	1881		5, 000		5, 000
	1884		10, 000		10, 000
	1886		10, 000		10, 000
	1888		15, 000		15, 000
Total for Jones river	1881		40, 000		40, 000
Mispillion creek	1879	3, 000			3, 000
	1880		4, 000		4, 000
	1881		3, 500		3, 500
	1882		3, 000		3, 000
	1888		3, 500		3, 500
Total for Mispillion creek	1879	3, 000	14, 000		17, 000
Newcastle harbor	1826	211, 469			211, 469
	1880		3, 000		3, 000
	1881		20, 000		20, 000
	1884		2, 000		2, 000
	1886		5, 000		5, 000
	1888		7, 500		7, 500
	1890			8, 100	8, 100
Total for Newcastle harbor	1826	211, 469	37, 500	8, 100	257, 069
Reedy Island harbor	1827	95, 736			95, 736
Smyrna river	1890			5, 000	5, 000
Wilmington harbor	1836	105, 856			105, 856
	1880		10, 000		10, 000
	1881		50, 000		50, 000
	1882		50, 000		50, 000
	1884		25, 000		25, 000
	1886		18, 750		18, 750
	1888		30, 000		30, 000
	1890			30, 000	30, 000
Total for Wilmington harbor	1836	105, 856	183, 750	30, 000	319, 606
MARYLAND	1836	1, 355, 318	1, 750, 775	407, 500	3, 513, 593
Annapolis harbor	1880		5, 000		5, 000
	1881		5, 000		5, 000
Total for Annapolis harbor	1880		10, 000		10, 000
Baltimore harbor (*a*)	1836	815, 000			815, 000
	1880		100, 000		100, 000
	1881		150, 000		150, 000
	1882		450, 000		450, 000
	1884		250, 000		250, 000
	1886		150, 000		150, 000
	1888		300, 000		300, 000
	1890			340, 000	340, 000
Total for Baltimore harbor	1836	815, 000	1, 400, 000	340, 000	2, 555, 000
Cambridge harbor	1871	35, 000			35, 000
	1888		5, 000		5, 000
	1890			5, 000	5, 000
Total for Cambridge harbor	1871	35, 000	5, 000	5, 000	45, 000

a See Patapsco river.

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
MARYLAND—Continued.					
Chesapeake bay (Battery island)	1836	$500			$500
	1886		$17,275		17,275
Total for Chesapeake bay	1836	500	17,275		17,775
Chester river	1873	28,000			28,000
	1881		6,500		6,500
	1882		6,500		6,500
	1890			$5,000	5,000
Total for Chester river	1873	28,000	13,000	5,000	46,000
Choptank river	1880		5,000		5,000
	1881		5,000		5,000
	1882		5,000		5,000
	1884		5,000		5,000
	1886		10,000		10,000
	1888		7,500		7,500
	1890			7,500	7,500
Total for Choptank river	1880		37,500	7,500	45,000
Corsica creek	1882		5,000		5,000
	1884		5,000		5,000
	1886		10,000		10,000
	1888		10,000		10,000
Total for Corsica creek	1882		30,000		30,000
Crisfield harbor	1875	37,318			37,318
Deal island passage	1881		5,000		5,000
	1882		5,000		5,000
Total for Deal island passage	1881		10,000		10,000
Elk river	1874	10,000			10,000
	1880		10,000		10,000
	1881		5,000		5,000
	1882		6,500		6,500
	1890			10,000	10,000
Total for Elk river	1874	10,000	21,500	10,000	41,500
Fairlee creek	1888		5,000		5,000
	1890			5,000	5,000
Total for Fairlee creek	1888		5,000	5,000	10,000
Leonardtown harbor (Breton bay)	1878	9,000			9,000
	1880		3,000		3,000
	1881		3,000		3,000
	1882		5,000		5,000
	1884		3,000		3,000
	1886		6,500		6,500
	1888		3,000		3,000
	1890			5,000	5,000
Total for Leonardtown harbor	1878	9,000	23,500	5,000	37,500
Manokin river	1890			7,500	7,500
Northeast river	1872	10,000			10,000
	1880		5,500		5,500
	1890			2,500	2,500
Total for Northeast river	1872	10,000	5,500	2,500	18,000
Patapsco river	1852	293,100			293,100
Patuxent river	1888		5,000		5,000
	1890			6,000	6 000
Total for Patuxent river	1888		5,000	6,000	11,000
Pocomoke river	1878	10,000			10,000
	1886		8,000		8,000
Total for Pocomoke river	1878	10,000	8,000		18,000
Queenstown harbor	1871	14,000			14,000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
MARYLAND—Continued.					
St. Jerome creek	1881		$6,500		$6,500
	1882		5,000		5,000
	1884		15,000		15,000
Total for St. Jerome creek	1881		26,500		26,500
Secretary creek	1880		3,000		3,000
	1881		3.000		3,000
Total for Secretary creek	1880		6,000		6,000
Susquehanna river	1852	$48,400			48,400
	1880		28,000		28,000
	1881		15,000		15,000
	1882		25,000		25,000
	1884		20,000		20,000
	1886		6,000		6,000
	1888		10,000		10,000
	1890			$4,000	4,000
Total for Susquehanna river	1852	48,400	104,000	4,000	156,400
Treadhaven creek	1881		6,000		6,000
Wicomico river	1872	33,000			33,000
	1880		5,000		5,000
	1881		2,000		2,000
	1884		10,000		10,000
	1890			10,000	10,000
Total for Wicomico river	1881	33,000	17,000	10,000	60,000
Worton harbor	1872	12,000			12,000
DISTRICT OF COLUMBIA	1833	501,500	1,825,000	280,000	2,606,500
Potomac river	1833	[a]351,500			351,500
	1882		400,000		400,000
	1884		500,000		500,000
	1886		375,000		375,000
	1888		300,000		300,000
Anacostia bridge	1887		110,000		110,000
Great Falls	1882		50,000		50,000
Washington and Georgetown harbors	1873	150,000			150,000
	1880		40,000		40,000
	1881		50,000		50,000
	1890			280,000	280,000
VIRGINIA	1829	1,292,580	1,694,800	508,000	3,495,380
Accotink creek	1872	5,000			5,000
Appomattox and James rivers	1852	45,000			45,000
Appomattox	1871	260,000			260,000
	1880		20,000		20,000
	1881		20,000		20,000
	1882		35.000		35,000
	1884		25,000		25,000
	1886		18,750		18,750
	1888		15,000		15,000
	1890			15,000	15,000
James	1836	530,500			530,500
	1880		75,000		75,000
	1881		60,000		60,000
	1882		75,000		75,000
	1884		75,000		75,000
	1886		112,500		112,500
	1888		225,000		225,000
	1890			200,000	200,000
Total for Appomattox and James rivers	1836	835,500	756,250	215,000	1,806,750
Aquia creek	1872	10,500			10,500
	1890			10,000	10,000
Total for Aquia creek	1872	10,500		10,000	20,500
Archer Hope river	1881		5,000		5,000
	1882		5,000		5,000
Total for Archer Hope river	1881		10,000		10,000

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[a] Of this amount, $150.000 was appropriated in 1833 for the removal of obstructions in the river, the purchase of Little Falls bridge, and the construction of a turnpike road.

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
VIRGINIA—Continued.					
Blackwater river	1878	$7,500			$7,500
	1880		$3,500		3,500
	1881		1,500		1,500
	1882		1,500		1,500
Total for Blackwater river	1878	7,500	6,500		14,000
Cape Charles City harbor	1890			$25,000	25,000
Channel from Norfolk to Atlantic ocean	1878	20,000			20,000
Chickahominy river	1878	6,000			6,000
	1880		2,000		2,000
	1881		2,000		2,000
	1882		5,000		5,000
	1886		4,000		4,000
	1888		2,500		2,500
	1890			2,500	2,500
Total for Chickahominy river	1878	6,000	15,500	2,500	24,000
Elizabeth river	1829	40,080			40,080
Hampton river	1878	12,000			12,000
	1890			10,000	10,000
Total for Hampton river	1878	12,000		10,000	22,000
Mattapony river	1880		2,500		2,500
	1881		3,300		3,300
	1884		2,500		2,500
	1886		5,000		5,000
	1888		3,000		3,000
	1890			3,000	3,000
Total for Mattapony river	1880		16,300	3,000	19,300
Nansemond river	1873	37,000			37,000
	1888		10,000		10,000
	1890			10,000	10,000
Total for Nansemond river	1873	37,000	10,000	10,000	57,000
Neabsco creek	1881		5,000		5,000
Nomoni creek	1873	23,500			23,500
	1880		5,000		5,000
	1881		2,000		2,000
	1882		2,000		2,000
	1888		5,000		5,000
	1890			5,000	5,000
Total for Nomoni creek	1873	23,500	14,000	5,000	42,500
Norfolk harbor	1876	160,000			160,000
	1880		50,000		50,000
	1881		75,000		75,000
	1882		75,000		75,000
	1884		75,000		75,000
	1886		187,500		187,500
	1888		50,000		50,000
	1890			150,000	150,000
Total for Norfolk harbor	1876	160,000	512,500	150,000	822,500
Nottoway river	1880		5,000		5,000
	1881		2,000		2,000
Total for Nottoway river	1880		7,000		7,000
Occoquan river	1873	25,000			25,000
	1890			10,000	10,000
Total for Occoquan river	1873	25,000		10,000	35,000
Onancock harbor	1879	3,000			3,000
	1880		5,000		5,000
	1890			6,000	6,000
Total for Onancock harbor	1879	3,000	5,000	6,000	14,000
Pagan creek	1880		5,000		5,000
	1881		5,000		5,000
Total for Pagan creek	1880		10,060		10,000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
VIRGINIA—Continued.					
Pamunkey river	1880		$2, 500		$2, 500
	1881		2, 500		2, 500
	1882		2, 500		2, 500
	1886		5, 000		5, 000
	1888		3, 000		3, 000
	1890			$3, 000	3, 000
Total for Pamunkey river	1880		15, 500	3, 000	18, 500
Potomac river (Mount Vernon channel)	1879	$4, 000			4, 000
	1880		3, 000		3, 000
	1881		1, 500		1 500
	1888		6, 000		6, 000
	1890			2, 500	2, 500
Total for Potomac river	1879	4, 000	10, 500	2, 500	17, 000
Rappahannock river	1852	93, 500			93, 500
	1880		25, 000		25, 000
	1881		15, 000		15, 000
	1882		17, 000		17, 000
	1884		20, 000		20. 000
	1886		20, 000		20, 000
	1888		15, 000		15, 000
	1890			15, 000	15, 000
Total for Rappahannock river	1852	93, 500	112, 000	15, 000	220, 500
Staunton river	1879	5, 000			5, 000
	1880		7, 500		7, 500
	1881		5, 000		5, 000
	1882		7, 000		7, 000
	1884		5, 000		5, 000
	1886		10, 000		10, 000
	1888		5, 000		5, 000
	1890			8, 000	8, 000
Total for Staunton river	1879	5, 000	39, 500	8, 000	52, 500
Totusky river	1880		2, 500		2, 500
	1881		2, 500		2, 500
	1882		5, 000		5, 000
Total for Totusky river	1880		10, 000		10, 000
Urbana creek	1879	5, 000			5, 000
	1880		2, 500		2, 500
	1881		4, 000		4, 000
	1882		4, 000		4, 000
	1890			3, 000	3, 000
Total for Urbana creek	1879	5, 000	10, 500	3, 000	18, 500
York river	1880		10, 000		10, 000
	1881		25, 000		25, 000
	1882		25, 000		25, 000
	1884		20, 000		20, 000
	1886		18, 750		18, 750
	1888		30, 000		30, 000
	1890			30, 000	30, 000
Total for York river	1880		128, 750	30, 000	158, 750
NORTH CAROLINA	1826	1, 919, 059	1, 910, 250	440, 000	4, 269, 309
Beaufort harbor	1836	5, 000			5, 000
	1881		30, 000		30, 000
	1882		30, 000		30, 000
	1884		20, 000		20, 000
	1886		15, 000		15, 000
	1888		35, 000		35, 000
	1890			15, 000	15, 000
Total for Beaufort harbor	1836	5, 000	130, 000	15, 000	150, 000
Cape Fear river above Wilmington	1881		30, 000		30, 000
	1882		30, 000		30, 000
	1884		5, 000		5, 000
	1886		11, 250		11, 250
	1886		12, 000		12, 000
	1890			15, 000	15, 000
Cape Fear river below Wilmington	1829	1, 430, 729			1, 430, 729
	1880		70, 000		70, 000
	1881		140, 000		140, 000
	1882		225, 000		225, 000
	1884		200, 000		200, 000
	1886		157, 500		157, 500
	1888		245, 000		245, 000
	1890			170, 000	170, 000
Northeast branch	1890			5, 000	5, 000
Total for Cape Fear river	1829	1, 430, 729	1, 125, 750	190, 000	2, 746, 479

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
NORTH CAROLINA—Continued.					
Black river	1886		$3, 000		$3, 000
Contentnea creek	1881		10, 000		10, 000
	1882		10, 000		10, 000
	1884		5, 000		5, 000
	1886		15, 000		15, 000
	1888		5, 000		5, 000
	1890			$7, 000	7, 000
Total for Contentnea creek	1881		45, 000	7, 000	52, 000
Croatan sound	1852	$50, 000			50, 000
Currituck sound	1878	45, 000			45, 000
	1880		25, 000		25, 000
	1881		30, 000		30, 000
	1882		20, 000		20, 000
	1884		5, 000		5, 000
	1886		10, 000		10, 000
	1888		7, 500		7, 500
	1890			10, 000	10, 000
Total for Currituck sound	1878	45, 000	97, 500	10, 000	152, 500
Edenton harbor	1878	5, 000			5, 000
	1884		10, 000		10, 000
	1886		2, 000		2, 000
Total for Edenton harbor	1878	5, 000	12, 000		17, 000
Fishing creek	1890			10, 000	10, 000
Lillington river	1881		3, 000		3, 000
	1882		3, 000		3, 000
Total for Lillington river	1881		6, 000		6, 000
Lockwood Folly river	1890			5, 000	5, 000
Lumber river	1888		5, 000		5, 000
	1890			5, 000	5, 000
Total for Lumber river	1888		5, 000	5, 000	10, 000
Mackey creek	1890			15, 000	15, 000
Meherrin river	1882		5, 000		5, 000
Neuse river	1878	85, 000			85, 000
	1880		45, 000		45, 000
	1881		30, 000		30, 000
	1882		35, 000		35, 000
	1884		20, 000		20, 000
	1886		22, 500		22, 500
	1888		15, 000		15, 000
	1890			20, 000	20, 000
Total for Neuse river	1878	85, 000	167, 500	20, 000	272, 500
Newbern inlet (Newbern to Beaufort)	1882		10, 000		10, 000
	1886		10, 000		10, 000
	1888		15, 000		15, 000
Total for Newbern inlet	1882		35, 000		35, 000
New river	1836	5, 000			5, 000
	1882		5, 000		5, 000
	1884		5, 000		5, 000
	1886		10, 000		10, 000
	1888		3, 000		3, 000
	1890			10, 000	10, 000
Total for New river	1836	5, 000	23, 000	10, 000	38, 000
New River channel (Beaufort river to New river)	1837	45, 000			45, 000
	1886		10, 000		10, 000
	1888		5, 000		5, 000
	1890			15, 000	15, 000
Total for New River channel	1837	45, 000	15, 000	15, 000	75, 000
Ocracoke inlet	1826	133, 750			133, 750
	1890			90, 000	90, 000
Total for Ocracoke inlet	1826	133, 750		90, 000	223, 750

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
NORTH CAROLINA—Continued.					
Pamlico and Tar rivers	1836	$31,000			$31,000
	1880		$9,000		9,000
	1881		8,000		8,000
	1882		10,000		10,000
	1884		5,000		5,000
	1886		5,000		5,000
	1888		10,000		10,000
	1890			$10,000	10,000
Total for Pamlico and Tar rivers	1836	31,000	47,000	10,000	88,000
Pasquotank river	1829	80			80
	1890			3,000	3,000
Total for Pasquotank river	1829	80		3,000	3,080
Perquimans river	1876	2,500			2,500
Roanoke river	1871	45,000			45,000
	1882		5,000		5,000
	1884		3,000		3,000
	1886		20,000		20,000
	1888		40,000		40,000
	1890			25,000	25,000
Total for Roanoke river	1871	45,000	68,000	25,000	138,000
Scuppernong river	1878	4,000			4,000
	1880		1,000		1,000
	1881		1,000		1,000
	1884		2,000		2,000
Total for Scuppernong river	1878	4,000	4,000		8,000
Town creek	1881		1,000		1,000
Trent river	1879	7,000			7,000
	1880		10,000		10,000
	1881		5,000		5,000
	1882		10,000		10,000
	1884		10,000		10,000
	1886		3,500		3,500
	1888		5,000		5,000
	1890			5,000	5,000
Total for Trent river	1879	7,000	43,500	5,000	55,500
Washington harbor	1852	5,000			5,000
Yadkin river	1879	20,000			20,000
	1880		20,000		20,000
	1881		12,000		12,000
	1882		25,000		25,000
	1886		10,000		10,000
	1888		10,000		10,000
	1890			5,000	5,000
Total for Yadkin river	1879	20,000	77,000	5,000	102,000
SOUTH CAROLINA	1836	550,000	1,895,000	583,000	3,028,000
Ashepoo river	1872	1,300			1,300
Ashley river	1880		1,000		1,000
	1881		1,500		1,500
	1884		2,000		2,000
	1886		1,000		1,000
Total for Ashley river	1880		5,500		5,500
Beaufort river	1890			12,500	12,500
Clark creek	1888		2,500		2,500
	1890			2,500	2,500
Total for Clark creek	1888		2,500	2,500	5,000
Charleston harbor	1852	544,700			544,700
	1880		175,000		175,000
	1881		175,000		175,000
	1882		300,000		300,000
	1884		250,000		250,000
	1886		187,500		187,500
	1888		350,000		350,000
	1890			370,000	370,000
Total for Charleston harbor	1852	544,700	1,437,500	370,000	2,352,200

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
SOUTH CAROLINA—Continued.					
Congaree river	1886		$7,500		$7,500
	1888		7,500		7,500
	1890			$5,000	5,000
Total for Congaree river	1886		15,000	5,000	20,000
Edisto river	1882		8,000		8,000
	1884		5,000		5,000
	1886		3,000		3,000
	1888		5,000		5,000
	1890			5,000	5,000
Total for Edisto river	1882		21,000	5,000	26,000
Georgetown harbor	1836	$4,000			4,000
	1882		7,000		7,000
	1884		5,000		5,000
	1886		5,000		5,000
	1888		7,500		7,500
	1890			8,000	8,000
Total for Georgetown harbor	1836	4,000	24,500	8,000	36,500
Great Pedee river	1880		7,000		7,000
	1881		6,000		6,000
	1882		6,000		6,000
	1884		8,000		8,000
	1886		20,000		20,000
	1888		20,000		20,000
	1890			12,500	12,500
Total for Great Pedee river	1880		67,000	12,500	79,500
Little Pedee river	1888		5,000		5,000
	1890			5,000	5,000
Total for Little Pedee river	1888		5,000	5,000	10,000
Mingo creek	1888		5,000		5,000
	1890			5,000	5,000
Total for Mingo creek	1888		5,000	5,000	10,000
Salkehatchie river	1882		5,000		5,000
	1884		3,000		3,000
	1886		2,000		2,000
	1888		3,000		3,000
	1890			5,000	5,000
Total for Salkehatchie river	1882		13,000	5,000	18,000
Santee river	1881		22,000		22,000
	1882		20,000		20,000
	1884		15,000		15,000
	1886		18,750		18,750
	1888		24,000		24,000
	1890			30,000	30,000
Total for Santee river	1881		99,750	30,000	129,750
Wappoo cut	1881		10,000		10,000
	1882		10,000		10,000
	1884		3,000		3,000
	1886		5,000		5,000
	1888		5,000		5,000
	1890			10,000	10,000
Total for Wappoo cut	1881		33,000	10,000	43,000
Wateree river	1881		8,000		8,000
	1882		15,000		15,000
	1884		5,000		5,000
	1886		7,500		7,500
	1888		12,000		12,000
	1890			12,500	12,500
Total for Wateree river	1881		47,500	12,500	60,000
Winyah bay	1886		18,750		18,750
	1888		100,000		100,000
	1890			100,000	100,000
Total for Winyah bay	1886		118,750	100,000	218,750

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
GEORGIA (on the Atlantic)	1826	$1, 120, 597	$1, 285, 609	$512, 500	$2, 918, 706
Altamaha river	1881		5, 000		5, 000
	1882		15, 000		15, 000
	1884		15, 000		15, 000
	1886		20, 000		20, 000
	1888		10, 000		10, 000
	1890			15, 000	15, 000
Total for Altamaha river	1881		65, 000	15, 000	80, 000
Brunswick harbor	1836	30, 000			30, 000
	1880		10, 000		10, 000
	1881		5, 000		5, 000
	1882		25, 000		25, 000
	1884		10, 000		10, 000
	1886		22, 500		22, 500
	1888		35, 000		35, 000
	1890			35, 000	35, 000
Total for Brunswick harbor	1836	30, 000	107, 500	35, 000	172, 500
Darien harbor	1878	8, 000			8, 000
	1890			25, 000	25, 000
Total for Darien harbor	1878	8, 000		25, 000	33, 000
Jekyl creek	1888		5, 000		5, 000
	1890			7, 500	7, 500
Total for Jekyl creek	1888		5, 000	7, 500	12, 500
Ocmulgee river	1876	37, 000			37, 000
	1880		7, 000		7, 000
	1881		5, 000		5, 000
	1882		5, 000		5, 000
	1884		3, 000		3, 000
	1886		7, 500		7, 500
	1888		15, 000		15, 000
	1890			30, 000	30, 000
Total for Ocmulgee river	1876	37, 000	42, 500	30, 000	109, 500
Oconee river	1878	11, 500			11, 500
	1880		1, 500		1, 500
	1881		2, 500		2, 500
	1882		5, 000		5, 000
	1884		3, 000		3, 000
	1886		9, 000		9, 000
	1888		12, 500		12, 500
	1890			25, 000	25, 000
Total for Oconee river	1878	11, 500	33, 500	25, 000	70, 000
Romerly marsh	1882		10, 000		10, 000
	1884		10, 000		10, 000
	1886		17, 475		17, 475
	1888		4, 634		4, 634
Total for Romerly marsh	1882		42, 109		42, 109
St. Augustine creek	1879	5, 000			5, 000
Savannah harbor	1872	452, 000			452, 000
	1880		65, 000		65, 000
	1881		65, 000		65, 000
	1890			350, 000	350, 000
Total for Savannah harbor	1872	452, 000	130, 000	350, 000	932, 000
Savannah river	1826	577, 097			577, 097
	1880		16, 000		16, 000
	1881		38, 000		38, 000
	1882		225, 000		225, 000
	1884		215, 000		215, 000
	1886		165, 000		165, 000
	1888		201, 000		201, 000
	1890			25, 000	25, 000
Total for Savannah river	1826	577, 097	860, 000	25, 000	1, 462, 097

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

ATLANTIC COAST—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
FLORIDA (on the Atlantic)	1829	$146,570	$982,000	$240,500	$1,369,070
Chipola river	1835	9,000			9,000
Indian river	1844	6,500			6,500
Key West harbor	1882		25,000		25,000
	1886		2,500		2,500
	1888		25,000		25,000
	1890			40,000	40,000
Total for Key West harbor	1882		52,500	40,000	92,500
Ocklawaha river	1835	10,000			10,000
	1890			10,000	10,000
Total for Ocklawaha river	1835	10,000		10,000	20,000
St. Augustine harbor	1829	33,570			33,570
	1888		35,000		35,000
	1890			20,000	20,000
Total for St. Augustine harbor	1829	33,570	35,000	20,000	88,570
St. John river	1852	87,000			87,000
	1880		139,000		139,000
	1881		100,000		100,000
	1882		150,000		150,000
	1884		155,000		155,000
	1886		150,000		150,000
	1888		175,000		175,000
	1890			170,000	170,000
St. John river (Volusia bar)	1880		5,000		5,000
	1881		5,500		5,500
	1882		5,000		5,000
	1884		2,000		2,000
	1886		7,500		7,500
	1888		500		500
	1890			500	500
Total for St. John river	1852	87,000	894,500	170,500	1,152,000
Yellow river	1839	500			500

GULF OF MEXICO.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
FLORIDA (on the Gulf of Mexico)	1828	230,280	579,500	135,500	945,280
Apalachicola bay and river	1828	75,250			75,250
	1880		12,000		12,000
	1881		11,500		11,500
	1882		27,000		27,000
	1884		11,000		11,000
	1886		13,000		13,000
	1888		22,000		22,000
	1890			22,000	22,000
Total for Apalachicola bay and river	1828	75,250	96,500	22,000	193,750
Caloosahatchee river	1882		5,000		5,000
	1884		5,000		5,000
	1886		4,000		4,000
	1888		10,000		10,000
	1890			3,600	3,600
Total for Caloosahatchee river	1882		24,000	3,600	27,600
Cedar Keys harbor	1872	67,500			67,500
	1880		15,000		15,000
	1884		5,000		5,000
	1886		7,000		7,000
	1888		7,500		7,500
	1890			2,500	2,500
Total for Cedar Keys harbor	1872	67,500	34,500	2,500	104,500
Lagrange bayou	1882		2,000		2,000
	1886		2. 000		2,000
	1888		3,000		3,000
	1890			3,000	3,000
Total for Lagrange bayou	1882		7,000	3,000	10,000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

GULF OF MEXICO—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
FLORIDA (on the Gulf of Mexico)—Continued.					
Manatee river	1882		$12,000		$12,000
	1886		11,000		11,000
	1888		5,000		5,000
	1890			$6,000	6,000
Total for Manatee river	1882		28,000	6,000	34,000
Ochlochney river	1833	$5,000			5,000
Pease river	1881		7,000		7,000
	1882		4,000		4,000
	1886		7,000		7,000
	1890			35,000	35,000
Total for Pease river	1881		18,000	35,000	53,000
Pensacola harbor	1878	30,000			30,000
	1880		40,000		40,000
	1881		20,000		20,000
	1882		50,000		50,000
	1884		55,000		55,000
	1886		20,000		20,000
	1888		35,000		35,000
	1890			25,000	25,000
Total Pensacola harbor	1878	30,000	220,000	25,000	275,000
St. Mark river	1828	37,530			37,530
Sarasota bay	1890			5,000	5,000
Suwanee river	1839	15,000			15,000
	1880		5,000		5,000
	1881		3,000		3,000
	1882		5,000		5,000
	1884		5,000		5,000
	1886		5,000		5,000
	1888		15,000		15,000
	1890			3,000	3,000
Total for Suwanee river	1839	15,000	38,000	3,000	56,000
Tampa bay	1880		10,000		10,000
	1881		10,000		10,000
	1882		20,000		20,000
	1884		20,000		20,000
	1886		10,000		10,000
	1888		25,000		25,000
	1890			25,000	25,000
Total for Tampa bay	1880		95,000	25,000	120,000
Withlacoochee river	1881		7,500		7,500
	1884		3,000		3,000
	1886		3,000		3,000
	1888		5,000		5,000
	1890			5,400	5,400
Total for Withlacoochee river	1881		18,500	5,400	23,900
GEORGIA (*a*)	1874	23,300	4,000		27,300
Etowah river	1876	1,300			1,300
Oostanaula and Coosawattee rivers	1874	22,000			22,000
	1880		2,000		2,000
	1881		1,000		1,000
	1882		1,000		1,000
Total for Oostanaula and Coosawattee rivers	1874	22,000	4,000		26,000
ALABAMA	1826	821,752	1,301,750	524,000	2,647,502
Alabama river	1878	55,000			55,000
	1880		25,000		25,000
	1881		20,000		20,000
	1882		20,000		20,000
	1884		10,000		10,000
	1886		15,000		15,000
	1888		20,000		20,000
	1890			20,000	20,000
Total for Alabama river	1878	55,000	110,000	20,000	185,000

a Rivers emptying into other rivers which flow into the Gulf of Mexico.

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

GULF OF MEXICO—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
ALABAMA—Continued.					
Black Warrior river	1884		$50,000		$50,000
	1886		56,250		56,250
	1888		118,000		118,000
	1890			$150,000	150,000
Total for Black Warrior river	1884		224,250	150,000	374,250
Cahawba river	1882		20,000		20,000
	1884		10,000		10,000
	1886		7,500		7,500
Total for Cahawba river	1882		37,500		37,500
Mobile harbor and Pass au Heron	1826	$766,752			766,752
	1880		125,000		125,000
	1881		100,000		100,000
	1882		125,000		125,000
	1884		200,000		200,000
	1886		90,000		90,000
	1888		250,000		250,000
	1890			350,000	350,000
Total for Mobile harbor and Pass au Heron	1826	766,752	890,000	350,000	2,006,752
Tallapoosa river	1882		15,000		15,000
	1884		10,000		10,000
	1886		7,500		7,500
	1888		7,500		7,500
	1890			4,000	4,000
Total for Tallapoosa river	1882		40,000	4,000	44,000
MISSISSIPPI	1827	76,400	311,125	60,000	447,525
Biloxi harbor	1882		5,000		5,000
	1886		12,500		12,500
	1888		18,500		18,500
	1890			9,000	9,000
Total for Biloxi harbor	1882		36,000	9,000	45,000
Noxubee river	1880		12,000		12,000
	1881		8,000		8,000
	1882		10,000		10,000
	1884		7,500		7,500
	1886		7,500		7,500
	1888		5,000		5,000
	1890			3,000	3,000
Total for Noxubee river	1880		50,000	3,000	53,000
Old Town creek	1882		3,000		3,000
Pascagoula river	1827	70,400			70,400
	1880		20,000		20,000
	1881		4,000		4,000
	1882		8,000		8,000
	1884		3,000		3,000
	1886		25,000		25,000
	1888		27,000		27,000
	1890			20,000	20,000
Total for Pascagoula river	1827	70,400	87,000	20,000	177,400
Pearl river	1879	6,000			6,000
	1880		37,500		37,500
	1881		27,500		27,500
	1882		17,500		17,500
	1884		12,500		12,500
	1886		17,625		17,625
	1888		22,500		22,500
	1890			28,000	28,000
Total for Pearl river	1879	6,000	135,125	28,000	169,125
LOUISIANA	1836	7,767,489	591,647	220,000	8,579,136
Amite river	1880		8,000		8,000
	1881		5,000		5,000
	1886		2,000		2,000
	1888		5,000		5,000
	1890			38,000	38,000
Total for Amite river	1880		20,000	38,000	58,000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

GULF OF MEXICO—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
LOUISIANA—Continued.					
Bogue Chitto river	1890			$5,000	$5,000
Calcasieu river and pass	1872	$15,000			15,000
	1881		$15,000		15,000
	1882		10,000		10,000
	1884		6,500		6,500
	1886		16,255		16,255
	1888		10,000		10,000
	1890			75,000	75,000
Total for Calcasieu river and pass	1872	15,000	57,755	75,000	147,755
Lake Ponchartrain harbor	1852	25,000			25,000
Plaquemines bayou	1888		100,000		100,000
	1890			100,000	100,000
Total for Plaquemines bayou	1888		100,000	100,000	200,000
Tangipahoa river	1872	2,500			2,500
	1880		5,000		5,000
	1881		2,000		2,000
	1884		2,000		2,000
Total for Tangipahoa river	1872	2,500	9,000		11,500
Tchefuncta and Bogue Falia rivers	1872	6,000			6,000
	1881		1,500		1,500
	1882		1,500		1,500
	1886		2,500		2,500
	1890			1,000	1,000
Total for Tchefuncta and Bogue Falia rivers	1872	6,000	5,500	1,000	12,500
Tickfaw river	1881		2,000		2,000
	1882		2,000		2,000
	1886		2,000		2,000
	1888		1,000		1,000
	1890			1,000	1,000
Total for Tickfaw river	1881		7,000	1,000	8,000
Vermilion river	1880		5,000		5,000
	1881		4,900		4,900
Total for Vermilion river	1880		9,900		9,900
Delta and passes of the Mississippi river:					
Channel and general improvements	1836	2,214,989			2,214,989
Surveys	1850	354,000	382,492		736,492
Jetties	1875	5,150,000			5,150,000
Total for delta and passes of the Mississippi river	1836	7,718,989	382,492		8,101,481
TEXAS	1852	1,247,200	4,342,500	893,150	6,482,850
Aransas pass and bay	1879	35,000			35,000
	1880		65,000		65,000
	1881		80,000		80,000
	1882		100,000		100,000
	1884		100,000		100,000
	1886		101,250		101,250
	1888		100,000		100,000
Total for Aransas pass and bay	1879	35,000	546,250		581,250
Brazos river	1880		40,000		40,000
	1881		40,000		40,000
	1882		50,000		50,000
	1884		10,000		10,000
	1886		18,750		18,750
Total for Brazos river	1880		158,750		158,750
Brazos Santiago harbor	1878	6,000			6,000
	1880		25,000		25,000
	1881		75,000		75,000
	1882		60,000		60,000
	1884		25,000		25,000
	1886		37,500		37,500
	1888		25,000		25,000
Total for Brazos Santiago harbor	1878	6,000	247,500		253,500

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

GULF OF MEXICO—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
TEXAS—Continued.					
Buffalo bayou	1881		$25,000		$25,000
	1882		50,000		50,000
	1884		25,000		25,000
	1886		18,750		18,750
	1888		25,000		25,000
	1890			$25,000	25,000
Total for Buffalo bayou	1881		143,750	25,000	168,750
Cedar bayou	1890			18,150	18.150
Colorado river of Texas	1852	$20,000			20,000
Galveston bay	1872	282,200			282,200
	1880		50,000		50,000
	1881		50,000		50,000
	1882		94,500		94,500
	1888		100,000		100,000
	1890			40,000	40,000
Total for Galveston bay	1872	282,200	294,500	40,000	616,700
Galveston harbor	1870	653,000			653,000
	1880		175,000		175,000
	1881		250,000		250,000
	1882		400,000		400,000
	1886		300,000		300,000
	1888		500,000		500,000
	1890			500,000	500,000
Total for Galveston harbor	1870	653,000	1,625,000	500,000	2,778,000
Matagorda bay (Indianola harbor)	1876	70,000			70,000
	1880		50,000		50,000
	1881		60,000		60,000
	1882		60,000		60,000
	1884		50,000		50,000
	1886		37,500		37,500
Total for Matagorda bay	1876	70,000	257,500		327,500
Rio Grande river	1876	17,000			17,000
Sabine and Neches rivers	1878	29,000			29,000
	1880		10,000		10,000
	1881		10,000		10,000
	1882		9,000		9,000
	1884		7,000		7,000
Total for Sabine and Neches rivers	1878	29,000	36,000		65,000
Sabine pass and bay	1875	113,000			113,000
	1880		50,000		50,000
	1881		150,000		150,000
	1882		150,000		150,000
	1884		200,000		200,000
	1886		198,750		198,750
	1888		250,000		250,000
	1890			300,000	300,000
Total for Sabine pass and bay	1875	113,000	998,750	300,000	1,411,750
San Antonio river	1852	1,500			1,500
Survey of rivers and harbors	1852	5,000			5,000
Trinity river	1852	15,500			15,500
	1880		4,000		4,000
	1881		10,000		10,000
	1882		8,000		8,000
	1888		12,500		12,500
	1890			10,000	10,000
Total for Trinity river	1852	15,500	34,500	10,000	60,000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

MISCELLANEOUS.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
Total	1828	$1,321,500	$3,772,350	$998,600	$6,092,450
Arthur Kill (New York and New Jersey)	1888		10,000		10,000
	1890			7,000	7,000
Total for Arthur Kill	1888		10,000	7,000	17,000
Chattahoochee river (Alabama, Florida, and Georgia)	1835	35,000			35,000
	1880		20,000		20,000
	1881		20,000		20,000
	1882		25,000		25,000
	1884		35,000		35,000
	1886		20,000		20,000
	1888		20,000		20,000
	1890			20,000	20,000
Total for Chattahoochee river	1835	35,000	140,000	20,000	195,000
Chattahoochee and Flint rivers (Georgia)	1874	70,000			70,000
Chincoteague bay inland waterway (Delaware and Virginia)	1886		18,750		18,750
	1888		50,000		50,000
	1890			50,000	50,000
Total for Chincoteague bay inland waterway	1886		68,750	50,000	118,750
Choctawhatchee river (Alabama and Florida)	1833	35,000			35,000
	1880		7,000		7,000
	1881		10,000		10,000
	1882		20,000		20,000
	1884		15,000		15,000
	1886		15,000		15,000
	1888		10,000		10,000
	1890			12,500	12,500
Total for Choctawhatchee river	1833	35,000	77,000	12,500	124,500
Coosa river (Alabama and Georgia)	1876	150,000			150,000
	1880		75,000		75,000
	1881		60,000		60,000
	1882		83,700		83,700
	1884		50,000		50,000
	1886		45,000		45,000
	1888		60,000		60,000
	1890			150,000	150,000
Total for Coosa river	1876	150,000	373,700	150,000	673,700
Cumberland sound (Georgia and Florida)	1880		30,000		30,000
	1881		100,000		100,000
	1882		50,000		50,000
	1884		75,000		75,000
	1886		112,500		112,500
	1888		112,500		112,500
	1890			112,500	112,500
Total for Cumberland sound	1880		480,000	112,500	592,500
Dan river (Virginia and North Carolina)	1880		10,000		10,000
	1881		8,000		8,000
	1882		7,500		7,500
	1884		5,000		5,000
	1886		20,000		20,000
Total for Dan river	1880		50,500		50,500
Delaware river (Delaware, New Jersey, New York, and Pennsylvania)	1836	581,000			581,000
	1880		235,000		235,000
	1881		250,000		250,000
	1882		286,000		286,000
	1884		200,000		200,000
	1886		210,000		210,000
	1888		250,000		250,000
	1890			250,000	250,000
Total for Delaware river	1836	581,000	1,431,000	250,000	2,262,000
Entrance to Dismal Swamp canal (North Carolina and Virginia)	1836	35,000			35,000
Escambia and Conecuh rivers (Alabama and Florida)	1833	10,500			10,500
	1880		8,000		8,000
	1881		5,000		5,000
	1882		12,000		12,000
	1884		15,000		15,000
	1886		12,000		12,000
	1888		10,000		10,000
	1890			7,500	7,500
Total for Escambia and Conecuh rivers	1833	10,500	62,000	7,500	80,000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

MISCELLANEOUS—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
Flint river (Georgia)	1878	$17,000			$17,000
	1880		$20,000		20,000
	1881		15,000		15,000
	1882		25,000		25,000
	1884		20,000		20,000
	1886		20,000		20,000
	1888		20,000		20,000
	1890			$20,000	20,000
Total for Flint river	1878	17,000	120,000	20,000	157,000
Little Narragansett bay (Rhode Island and Connecticut)	1876	20,000			20,000
	1880		5,000		5,000
	1881		5,000		5,000
	1882		6,000		6,000
Total for Little Narragansett bay	1876	20,000	16,000		36,000
Nanticoke river (Delaware and Maryland)	1886		10,000		10,000
Norfolk to Atlantic ocean (Virginia and North Carolina)	1878	20,000			20,000
North Landing river (Virginia and North Carolina)	1879	25,000			25,000
	1880		15,000		15,000
	1881		7,500		7,500
	1882		8,000		8,000
Total for North Landing river	1879	25,000	30,500		55,500
Pawcatuck river (Rhode Island and Connecticut)	1871	50,000			50,000
	1886		12,000		12,000
	1888		10,000		10,000
	1890			16,600	16,600
Total for Pawcatuck river	1871	50,000	22,000	16,600	88,600
Philadelphia harbor (Pennsylvania and New Jersey)	1888		505,000		505,000
	1890			200,000	200,000
Total for Philadelphia harbor	1888		505,000	200,000	705,000
Shenandoah river (West Virginia)	1880		15,000		15,000
	1881		2,500		2,500
Total for Shenandoah river	1880		17,500		17,500
Staten Island channel (New York and New Jersey)	1874	75,000			75,000
	1880		29,000		29,000
	1882		40,000		40,000
	1884		10,000		10,000
	1886		15,000		15,000
	1888		15,000		15,000
	1890			15,000	15,000
Total for Staten Island channel	1874	75,000	109,000	15,000	199,000
St. John and St. Mary inland passage (Georgia and Florida)	1828	78,000			78,000
Waccamaw river (North Carolina and South Carolina)	1880		15,000		15,000
	1881		10,000		10,000
	1882		4,400		4,400
	1884		6,000		6,000
	1886		15,000		15,000
	1890			12,500	12,500
Total for Waccamaw river	1880		50,400	12,500	62,900
Warrior and Tombigbee rivers (Alabama and Mississippi)	1872	120,000			120,000
	1880		51,000		51,000
	1881		26,000		26,000
	1882		31,000		31,000
	1884		37,000		37,000
	1886		37,500		37,500
	1888		16,500		16,500
	1890			125,000	125,000
Total for Warrior and Tombigbee rivers	1872	120,000	199,000	125,000	444,000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 39.—APPROPRIATIONS FOR ATLANTIC COAST AND GULF OF MEXICO—Continued.

GENERAL APPROPRIATIONS.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations September 19, 1890.	Total appropriations to date.
Total	1841	$4, 832, 127	$258, 575		$5, 090, 702
For the preservation and repair of harbor and river improvements, not mentioned in foregoing statements.	1841	85, 000			85, 000
For repairs and contingencies	1852	110, 000			110, 000
For transportation, fuel, etc	1852	12, 127			12, 127
For surveys	1866	60, 000			60, 000
For the repair, extension, and completion of public works on rivers and harbors, not mentioned in foregoing statements.	1868	3, 500, 000			3, 500, 000
For examination and surveys for which there is no special appropriation	1870	1, 065, 000			1, 065, 000
	1880		150, 000		150, 000
	1881		50, 000		50, 000
Total	1870	1, 065, 000	200. 000		1, 265, 000
For removal of sunken vessels	1880		8, 575		8, 575
For the purchase of Shreve's patent	1881		50, 000		50, 000

TRANSPORTATION ON THE PACIFIC COAST.

(EXCLUSIVE OF ALASKA.)

TRANSPORTATION ON THE PACIFIC COAST.

(EXCLUSIVE OF ALASKA.)

BY THOMAS J. VIVIAN.

The statistics of transportation which are presented in the accompanying report are for the seaports and inland waterways of the states of Washington, Oregon, and California. From the official description of the Pacific coast furnished by the United States Coast and Geodetic Survey, it may be briefly stated that from the southern boundary of California, in latitude 32° 32′, longitude 117° 08′, to Point Arguello, in latitude 34° 34′, longitude 120° 38′, the coast runs west-northwest 225 miles, off which stretch lie the Santa Barbara islands; that from Point Arguello to Cape Mendocino, in latitude 40° 25′, longitude 124° 22′, it runs northwest 525 miles, embracing the Bay of Monterey and the gulf of the Farallones with the entrance to San Francisco bay; and that from Cape Mendocino to Cape Flattery, in latitude 48° 23′, longitude 124° 44′, it runs north-northwest 480 miles, embracing Humboldt bay, the great reefs of Point St. George and Cape Orford, the entrance to the Columbia river, and the Strait of Juan de Fuca.

COMMERCIAL FACILITIES.

According to the same authority the Pacific coast shore lines are as follows:

	STATUTE MILES.
Length of coast of California, including the Santa Barbara islands, and not including the bays and rivers	1,280
Oregon	382
Washington, including the islands of Washington sound, Admiralty inlet, and Puget sound	2,028
Total shore line	3,690

The advantages thus given and the facilities afforded for the prosecution of maritime commerce by such a vast coast line with the numerous harbors, inlets, and rivers that penetrate far into the interior, have not yet been fully appreciated or comprehended, although with each succeeding year the true magnitude of their possibilities is becoming understood.

COAST OF CALIFORNIA.

The coast of California lies between 32° 32′ and 42° north latitude. Measured from point to point its length is 850 statute miles. Its trend is from southeast to northwest, the most southerly point being also the most easterly. The most westerly point is not, however, the highest in latitude, Cape Mendocino, 100 miles south of the northern boundary, being farthest to the west. Up to this point from the Mexican boundary the trend of the coast is irregularly to the westward.

The gulf of the Farallones (in the bight of which is the entrance to San Francisco harbor), the Bay of Monterey, and a marked deviation to the east at Point Conception, are the prominent exceptions to the general northwesterly trend of the coast, and are the only instances of breaks of the continuity in large forms. The eastward recession of the coast at Point Conception partially protects the shore to the southward from northwesterly winds, and thereby serves to impart a noticeable softening to the coast climate of southern California. This protection makes landings on the open coast practicable to a much greater extent to the south of Point Conception than is possible to the north of it.

The shore line of California is generally bold and bluff to the sea, and is often mountainous and forbidding as viewed from the ocean. There are, however, a number of low plains or sand beaches interspersed between rocky points, but almost throughout its length it is bounded on the east side by ranges of mountains, which either come directly to the ocean or in other places recede a few miles from the shore line, being conspicuously visible in clear weather many miles at sea. The topography of the coast belt in general makes communication by land difficult, and in long stretches of coast the only outlet for productions or facility for trade is afforded by the sea.

The streams which discharge into the ocean are for the most part short and steep in descent. At their mouths shallow bars are found. The tide gives them whatever value they possess for purposes of navigation. This value is not great; the depth of the few whose mouths admit vessels does not exceed 8 to 12 feet at high tide in channels that are frequently changed in position by gales of wind. The Salinas, Eel, and Klamath rivers are the largest examples.

A noticeable characteristic of the coast is the occurrence of esteros or lagoons, in which the tide rises and falls. In some instances they give admittance at high water to vessels drawing 8 to 10 feet. Wilmington harbor has been improved by the federal government so that vessels drawing 16 feet now enter. No improvement has been attempted at any of the other esteros, such as Newport, Morro, Drakes, and Bodega, but they are not of great value to commerce.

As for harbors, there are but two suitable for the largest vessels, San Francisco, admirable in every respect, and San Diego, smaller, but good. They are 500 miles apart. North of San Francisco there is no deep water harbor. Humboldt harbor to the north and Wilmington to the south are the only remaining instances of harbors which admit vessels with drafts of more than 8 to 10 feet. The limit of draft of vessels for these harbors is about 16 feet.

SAN FRANCISCO BAY AND ITS RIVERS.

What is popularly known as San Francisco bay is really a series of bays, as the different parts bear different names. San Francisco bay is 40 miles in length, extending 30 miles south of the city and 10 miles north of it. Adjoining it on the north, with an eastward trend, is San Pablo bay, about 12 miles in length, connected with Suisun bay lying to the eastward by the Strait of Karquinez, which is about 6 miles in length, the total mid-tide area of all these bays being 450 square miles.

The channels of the bay, while not free from rocks, are free from danger, and, indeed, San Francisco harbor, by reason of its unusual depth of entrance, freedom from hidden dangers, conspicuous landmarks, and its internal commodiousness and capacity, is well endowed.

The two rivers which drain the central valley of California, the Sacramento and San Joaquin, discharge together at the eastern end of Suisun bay, and, together with the bays already mentioned, afford continuous navigation to the considerable towns of Sacramento and Stockton, and to a large district of agricultural country lying above these points. The navigable portion of the Sacramento river is about 230 miles in length. The lower stretch, extending from Sacramento to the mouth, 60 miles in length, is affected by the tide for the greater part of its length, and is navigable for the largest class of river boats. The next division carries 4 feet of water in the lowest stage of the river to Colusa, 106 miles distant from Sacramento. Above Colusa the fall of the river increases rapidly. It is navigable for boats and barges drawing about 3 feet to Mackintosh landing, 68 miles farther up the Feather, which enters the Sacramento 20 miles above the city of the same name, and is navigable to the town of Marysville, 30 miles from its mouth. The San Joaquin river is navigable for large steamboats from its mouth to Stockton slough, a distance of 38 miles. During the winter and spring, navigation is practicable for light drafts to Hills Ferry, 90 miles farther up stream.

The Mokelumne river, Old river, and other tidal channels subsidiary to the San Joaquin afford steam navigation to more or less extent.

A number of tidal channels, locally known as creeks, make up from the bays, sometimes for a considerable distance, and afford navigation for light-draft boats and cheap communication with San Francisco. The largest of these are Napa, Petaluma, and Suisun creeks, the respective heads of navigation being thriving towns bearing the same names, while the whole 32 tidal channels contribute no less than 194 miles to the navigable waters of the bay.

ROADSTEADS AND LANDINGS.

The lack of convenient harbors and the difficult topography of the coast would seem to be insuperable obstacles, forbidding commerce, and consigning the coast lands to isolation. Yet a large aggregate of commerce is carried on by small vessels, which find shelter and opportunity in roadsteads, large and small, convenient or otherwise, which are distributed over almost the whole length of the coast.

The coast line, although little broken in large forms or provided with inlets admitting vessels, is irregular in a small way, being frequently varied by jutting rocky points, which afford a lee to the southward and shelter from the prevailing winds from the northwest which blow parallel to the coast line. The bights thus formed are entirely uncovered on one side, namely, to the south. Monterey roadstead is the only exception, it being open to the north and covered from the south. All others are sheltered on the north side and open in the south. In southerly weather vessels lying in these roadsteads are in danger of being driven ashore by wind or by the inset of a heavy sea.

The period of northerly or northwesterly winds covers most of the year. During winter months southerly winds occur at intervals, but not continuously. They are less frequent and less violent south of Point Conception than on the northern half of the coast, where they are liable to occur in severe storms, accompanied by heavy seas from the southwest. They are not, however, of long duration.

The coast is a lee shore in southwesterly gales, and sailing vessels finding themselves near the coast under these conditions are fortunate if they escape destruction. The prevailing northwesterly winds, however, do not expose vessels to the dangers of a lee shore, as they occur but as moderate gales. There is almost always a heavy surf, even in calm weather, which makes it dangerous to land in boats at unsheltered points.

The principal roadsteads in order of latitude south to north are San Pedro, San Luis Obispo, or Port Harford, Monterey, and Santa Cruz, situated south of San Francisco, and Drakes bay, Trinidad, and Crescent city, to the north of San Francisco.

In addition there are a great number of small roadsteads, including bays with shallow bars, river entrances, places with shelter for a very few vessels, and landings upon the open coast, where small vessels, steam or sail, receive or discharge cargo. No square rigged vessels or large steamers visit these points.

Most of these landings are contracted. They are usually provided with substantial moorings. Where trade warrants and where the position is not too exposed a wharf is built. In other cases, where the shore is high, cargo is put aboard by a chute or by means of a wire cable made fast to the mast of a vessel lying at anchor.

The distribution of these landings on different parts of the coast is quite unequal. Between the parallels 38° and 40° they are thickly grouped, there being nearly 40 in this interval. This is a region of some agricultural production, but the main trade is in the various forms of redwood lumber, railroad ties, and posts.

The mountainous character of Cape Mendocino and the absence of productions serve to reduce the number of landings between parallels 40° and 42° to six, in which, however, are included several points of importance.

Between San Pedro and San Diego there are but few landings, and they are sparsely distributed between Point Conception and Monterey.

Dense fogs prevail along the coast during the late summer and early autumn. They are a source of real danger, which is being reduced as the number of steam fog signals on shore is increased. These, with automatic whistling buoys, are now placed off the entrances of the most important ports.

COAST OF OREGON.

The coast line of Oregon is very similar to that of California, the cliffs for long stretches being almost vertical and covered with a dense growth of timber and underbrush, varied with sand dunes, a few bights, and an occasional estuary and lagoon. The harbors formed by the mouths of rivers are more numerous than any other class of landings for commercial purposes, the principal being the mouth of the Rogue river, which is quite extensive; the mouth of the Coquille, between which and San Francisco there plies a large fleet of lumber schooners; the mouth of the Umpqua, forming one of the best ports of the northwestern coast; the mouth of the Siuslaw, often called Siuslaw bay; Siletz river bay, and Nehalem bay, which is really the tidal mouth of the river of the same name.

Coos bay is quite an extensive lagoon, sheltered by Cape Arago, and contains the two important towns of Empire city and Marshfield, from which places steamship lines ply regularly to San Francisco and Portland. Yakima bay and Tillamook harbor are good roadsteads, ocean steamers of from 12 to 14 feet draft running regularly between these places and San Francisco, 450 miles to the south. Alsea bay and Chetco bay afford good landings, while Astoria is situated on an extensive estuary, into which Youngs and Klaskuine rivers empty their waters. Just above the entrance to the Rogue river, 350 miles north of San Francisco and lying under the shelter of Cape Blanco, the most westerly point of the Pacific coast states, is Port Orford, selected by United States engineers as the harbor of refuge for Oregon.

The most remarkable waterways of Oregon are the Columbia and Willamette rivers. The Columbia belongs both to Washington and Oregon. The Willamette flows northward about midway between the coast range and the Cascade mountains and empties into the Columbia river at a point about 100 miles from the ocean, receiving in its course the five important westward flowing streams: the Clockalas, Moalla, Pudding, Santiam, and McKenzie, while flowing east into it are the Tutatulin, Chehalem, Yam Hill, La Crole, Luckiamute, Marys, Long Tom, and Callaposia, all of these being streams of importance and many of them navigable. The Willamette is navigable for steamers and river craft 125 miles from its mouth.

The city of Portland is situated on the Willamette, about 12 miles from its confluence with the Columbia and 110 miles by river from the ocean. It is at the head of ocean navigation for nearly the whole area drained by the Columbia river, and is remarkable as being the first place north of San Francisco, from which it is distant 709 miles, which will admit seagoing vessels of all classes. Its trade not only includes the comparatively local traffic of northern California, western Montana, and British Columbia, but also a large and increasing foreign commerce in wheat to England and the continent, in flour to Japan, and in lumber to England, China, and South America.

THE COLUMBIA RIVER.

This great river of the northwest forms the boundary line between the states of Oregon and Washington for 320 miles. Its principal tributary, the Snake river, flows through the latter state as a navigable river for 168 miles. The Columbia is navigable for steamboats of considerable draft for a distance of more than 1,000 miles from its mouth. For the first 100 miles it is five miles in width and has a depth sufficient to carry ocean vessels.

COAST OF WASHINGTON.

The coast of Washington, from the mouth of the Columbia to Cape Flattery, is even less broken than that of Oregon, the only indentations of any commercial consequence being Shoalwater bay and Grays harbor. Shoalwater bay is a long, narrow arm of the sea, lying parallel and close to the coast, and having many of the characteristics of the more southerly lagoons. The Willapa, Nasel, and North empty into the bay and are all navigable. Fifteen miles above the entrance of Shoalwater bay lies Grays harbor, the entrance to which is marked by a bar unusually safe and easy of passage. Grays harbor covers an area of 70 square miles, most of which, however, is bare or shoal at low tide. The Chehalis, Hoquiam, Johns river, and Humptulips all empty into the harbor just inside the entrance and form an excellent anchorage.

PUGET SOUND.

This landlocked body of salt water is the distinguishing feature of the state of Washington as well as of the extreme northwestern section of the United States. The distance from the channel line in the Strait of Fuca to Olympia, the head of navigation, is 117 miles. Narrow inlets from 5 to 35 miles in length, all navigable for steamers and many for deep water ships, extend from the main body in all directions, the inside shore line on the sound following these ramifications being upward of 19,000 miles. The average depth of the sound is 70 fathoms, and it is remarkable that it has for its whole extent no rocks, quicksands, or shoals. A number of rivers flow into the sound, nearly all of which take their rise in the glaciers of Mount Tacoma and other peaks of the Cascade range, the principal being the Nooksachk, Skagit, Samish, Stillaguamish, Snohomish, Snoqualmie, Nesqually, Skokomish, Dwamish, and Puyallup.

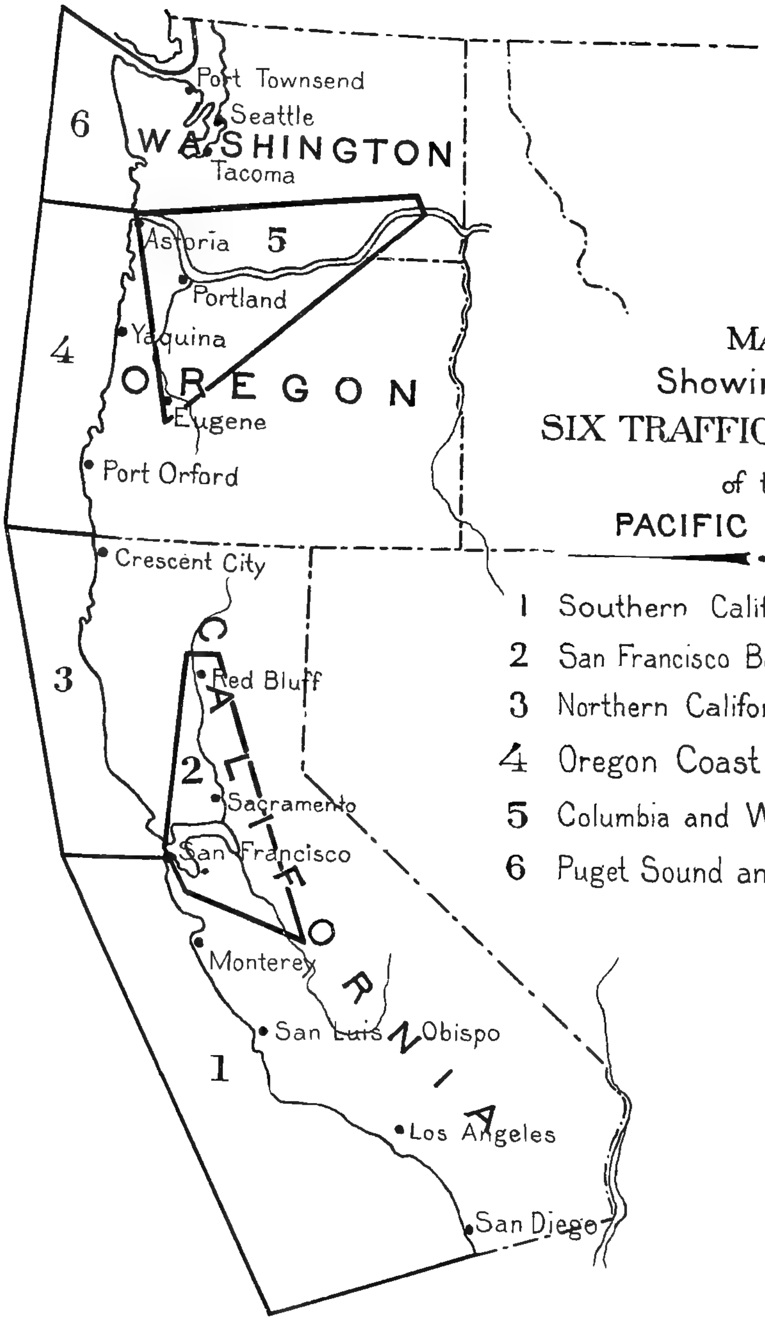
INSPECTION RETURNS.

A correct idea of the growth of active tonnage on the Pacific coast from the earliest date of official record up to the year 1880 may be gathered from the following table compiled from the records of the United States steamboat inspection service. The entries for the later years will be given in that portion of the text wherein the comparative statistics for the period bounded by the census years 1880–1890 are considered.

TABLE A.—STATEMENT SHOWING THE NUMBER AND TONNAGE OF ACTIVE STEAMERS INSPECTED ON THE PACIFIC COAST FROM 1855 TO 1880, INCLUSIVE, GIVEN FOR THE INSPECTION DISTRICTS OF SAN FRANCISCO, CALIFORNIA, PORTLAND, OREGON, AND PUGET SOUND, WASHINGTON.

YEARS.	TOTAL PACIFIC COAST.		SAN FRANCISCO.		PORTLAND.		PUGET SOUND.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1855	33	19,714	33	19,714				
1856 (a)								
1857	35	18,239	35	18,239				
1858	35	20,057	35	20,057				
1859	31	18,170	31	18,170				
1860	43	23,493	43	23,493				
1861 (a)								
1862	75	30,477	50	27,654	25	2,823		
1863	68	25,868	44	22,509	24	3,359		
1864	70	32,598	43	28,853	27	3,745		
1865	88	38,124	63	33,686	25	4,438		
1866	99	46,812	73	42,738	26	4,074		
1867	119	57,198	85	49,162	34	8,036		
1868	107	69,645	87	64,254	20	5,391		
1869	166	75,934	113	65,660	53	10,274		
1870	154	63,156	101	53,625	53	9,531		
1871	180	83,279	110	70,539	50	10,388	20	2,352
1872	173	83,925	101	71,996	50	9,224	22	2,705
1873	204	83,271	124	67,804	55	12,358	25	3,109
1874	217	95,643	136	79,830	57	12,696	24	3,117
1875	222	98,368	136	79,392	64	15,690	22	3,286
1876	249	94.957	152	74,433	61	16,125	36	4,399
1877	271	102,912	163	78,348	71	19,548	37	5,016
1878	288	112,327	165	83,664	81	24,041	42	4,622
1879	292	109,790	161	78,401	92	26,789	39	4,600
1880	288	107,729	161	78,599	91	24,650	36	4,480

a In 1856 and 1861 no inspections were made.



MAP
Showing the
SIX TRAFFIC DISTRICTS
of the
PACIFIC COAST

1 Southern California Coast
2 San Francisco Bay and Tributary rivers
3 Northern California Coast
4 Oregon Coast
5 Columbia and Willamette rivers
6 Puget Sound and Washington Coast

LOCALITIES OF REGISTRATION, EQUIPMENT, AND TRAFFIC.

In order to facilitate the presentation of statistics two systems of assignment have been devised and followed. The first system is that of segregating the various reports according to the customs districts, of which there are nine in the states of California, Oregon, and Washington. These, with their distinctive names, ports of entry, and ports of delivery, together with their boundary lines, are as follows:

NAMES, PORTS, AND BOUNDARY LINES OF THE CUSTOMS DISTRICTS OF CALIFORNIA, OREGON, AND WASHINGTON.

CALIFORNIA.

NUMBERS.	Name of district.	Port of entry.	Port of delivery.	Boundary line.
1	San Diego	San Diego		From Mexico to Point San Mateo.
2	Wilmington	Wilmington	Santa Barbara, San Buenaventura, and Hueneme.	From Point San Mateo to Point Sal, California.
3	San Francisco	San Francisco	Vallejo and San Luis Obispo	From Point Sal to south line of Humboldt county, California.
4	Humboldt	Eureka	Crescent City	From south line of Humboldt county, California, to Oregon.

OREGON.

NUMBERS.	Name of district.	Port of entry.	Port of delivery.	Boundary line.
5	Southern Oregon	Coos bay	Ellensburg, Port Orford, and Gardiner.	From south line of Oregon to the south line of Lane county, Oregon.
6	Yaquina	Yaquina	Newport	From south line of Lane county, Oregon, to Cape Lookout, Oregon.
7	Oregon	Astoria		From Cape Lookout to Tillamook head, Oregon.
8	Willamette	Portland		From Portland, Oregon, to mouth of Willamette river.

WASHINGTON.

NUMBERS.	Name of district.	Port of entry.	Port of delivery.	Boundary line.
9	Puget Sound	Port Townsend		From Tillamook head to north boundary of Washington.

To these districts all the statistics of number, valuation, tonnage, construction, rig, occupation, earnings, expenses, and operations have been assigned. The statistics assigned to the customs districts stand as the reports of the vessels registered in the ports embraced in those districts, but do not stand as the reports of the trade of ports, nor do they indicate well defined movements of commerce. The plan was therefore adopted of selecting "traffic districts" between or within which a more or less distinctive trade is carried on; these districts being entitled as follows:

TRAFFIC DISTRICTS.

1 Southern California coast.
2 San Francisco bay and tributary rivers.
3 Northern California coast.
4 Oregon coast.
5 Columbia and Willamette rivers.
6 Puget sound and Washington coast.
7 Foreign ports.
8 Atlantic ports.
9 Alaska coast and Bering sea.

Of these districts, it will be observed, six are located on the coast of the states of California, Oregon, and Washington, their limitations being set down on the accompanying map, while the ports and trading points of all the districts at which Pacific coast vessels made a report of having called are given in the following lists:

District No. 1, entitled "Southern California coast", includes the following ports and landings:

Amesport, San Mateo county.
Anaheim, Orange county.
Andersons landing, San Diego county.
Aptos, Santa Cruz county.
Avalon, Los Angeles county.
Ballona harbor, Los Angeles county.
Cape San Martin, Monterey county.
Carpenteria, Santa Barbara county.
Catalina island, San Diego county.
Cayucos, San Luis Obispo county.
Coronado, San Diego county.
Davenports landing, Santa Cruz county.
Farallones, San Francisco county.
Gaviota, Santa Barbara county.
Goleta, Santa Barbara county.
Gordons, Monterey county.
Half Moon bay, San Mateo county.
Hueneme, Ventura county.
Lompoc landing, Santa Barbara county.
Los Berros, San Luis Obispo county.
Monterey, Monterey county.
Morro, San Luis Obispo county.
Moss landing, Monterey county.
Newport, Orange county.
Pacific Grove, Monterey county.
Pajaro, Monterey county.
Palos Verdes, Los Angeles county.
Pescadero, San Mateo county.
Piedras Blancas, San Luis Obispo county.
Pigeon point, San Mateo county.
Pillar point, San Mateo county.
Point Arguello, Santa Barbara county.
Point Buchon, San Luis Obispo county.
Point Conception, Santa Barbara county.
Point Cypress, Monterey county.
Point Gordo, Monterey county.
Point Lobos, San Francisco county.
Point Loma, San Diego county.
Point Monterey, San Mateo county.
Point Nuevo Ano, San Mateo county.
Point Pinos, Monterey county.
Point Purissima, Santa Barbara county.
Point Sal, Santa Barbara county.
Point San Pedro, Los Angeles county.
Point Sur, Monterey county.
Port Harford, San Luis Obispo county.
Redondo, Los Angeles county.
Salinas landing, Monterey county.
San Buenaventura, Ventura county.
San Clemente island, San Diego county.
San Diego, San Diego county.
San Nicolas island, San Diego county.
San Pedro, Los Angeles county.
San Simeon, San Luis Obispo county.
Santa Barbara islands, Santa Barbara county.
Santa Barbara, Santa Barbara county.
Santa Cruz island, Santa Barbara county.
Santa Cruz, Santa Cruz county.
Santa Monica, Los Angeles county.
Santa Rosa island, Santa Barbara county.
Soquel, Santa Cruz county.
Watsonville landing, Monterey county.
Williams landing, Santa Cruz county.
Wilmington, Los Angeles county.

District No. 2, entitled "San Francisco bay and tributary rivers", includes the following ports and landings:

Alameda, San Francisco bay.
Alvarado, San Francisco bay.
Alviso, San Francisco bay.
Andersons landing, San Francisco bay.
Angel island, San Francisco bay.
Antioch, San Joaquin river.
Barrons landing, Suisun bay.
Benicia, San Francisco bay.
Bensons landing, San Francisco bay.
Berkeley, San Francisco bay.
Birds landing, Sacramento river.
Black Diamond, Sacramento river.
Black point, San Francisco bay.
Blind bay, San Francisco bay.
Bob Mains landing, San Francisco bay.
Bolton island, San Joaquin river.
Boulder island, San Joaquin river.
Bracks landing, Sacramento river.
Buhlers landing, Suisun bay.
Burdsells landing, Sacramento river.
Butte city, Sacramento river.
California city, San Francisco bay.
Cant creek, San Francisco bay.
Clarksburg, Sacramento river.
Collinsville, Sacramento river.
Colusa, Sacramento river.
Courtland, Sacramento river.
Crows landing, Sacramento river.
Decota, Sacramento river.
Dumbarton, Sacramento river.
Duttons, San Francisco bay.
Fairfield, Sacramento river.
Fair Oaks, Sacramento river.
Firebaugh, San Joaquin river.
Franklin, Sacramento river.
Freeport, Sacramento river.
Galinas creek, San Francisco bay.
Goat island, San Francisco bay.
Grafton, Sacramento river.
Grand island, Sacramento river.
Gravel beds, San Francisco bay.
Grayson, Sacramento river.
Haystack landing, Sacramento river.
Hunters point, San Francisco bay.
Iron Horse slough, Sacramento river.
Isleton, Sacramento river.
Jarvis landing, San Francisco bay.
Jersey landing, Sacramento river.
Jewels landing, San Francisco bay.
Knights landing, Sacramento river.
Lakeville, Sacramento river.
Linden, Sacramento river.
Long bridge, San Francisco bay.
Lux ranch, San Francisco bay.
McIntosh landing, Sacramento river.
Maine prairies, Sacramento river.
Mare island, San Francisco bay.
Martinez, San Francisco bay.
Marysville, Sacramento river.
Maurys landing, San Francisco bay.
Mayhews landing, San Francisco bay.
Meiggs wharf, San Francisco bay.
Melrose, San Francisco bay.
Milpitas, San Francisco bay.
Mokelumne river, San Joaquin river.
Mott landing, San Francisco bay.
Mountain View, San Francisco bay.
Mount Eden, San Francisco bay.
Mulfords landing, Napa creek.
Napa, Napa creek.
New Hope, Sacramento river.
New town, Sacramento river.
Novato, San Francisco bay.
Oakland, San Francisco bay.
Oregon dock, San Francisco bay.
Oyster beds, San Francisco bay.
Pacheco, San Francisco bay.
Pattersons landing, Sacramento river.
Petaluma creek, San Francisco bay.
Petaluma, Petaluma creek.
Peter point, San Francisco bay.
Pinole, San Francisco bay.
Pipers slough, San Francisco bay.
Pittsburg landing, San Joaquin river.
Port Costa, San Francisco bay.
Potato slough, San Joaquin river.
Powning, San Francisco bay.
Presidio, San Francisco bay.
Ravenswood, San Joaquin river.
Redwood city, San Francisco bay.
Richland, Sacramento river.
Rio Vista, Sacramento river.
Roberts island, San Joaquin river.
Rolling mills, San Francisco bay.
Rose landing, San Joaquin river.
Rose slough, San Joaquin river.
Sacramento, Sacramento river.
Salt slough, San Joaquin river.
Salt works, San Francisco bay.
San Bruno, San Francisco bay.
San Francisco, San Francisco bay.
San Francisquito, San Joaquin river.
San Joaquin, San Joaquin river.
San Mateo, San Francisco bay.
San Pablo, San Francisco bay.
San Quentin, San Francisco bay.
San Rafael, San Francisco bay.
Sausalito, San Francisco bay.
Seal bluff, San Francisco bay.
Selbys, San Francisco bay.
Sierra point, San Francisco bay.
Snodgrass slough, San Joaquin river.
Sobrante, San Francisco bay.
Sonoma landing, San Francisco bay.
Stockton, San Joaquin river.
Stones landing, San Francisco bay.
Stratton island, San Joaquin river.
Suisun, Suisun bay.
Sutterville, San Joaquin river.
Tabors landing, San Francisco bay.
Thomas landing, San Francisco bay.
Tiburon, San Francisco bay.
Tolands landing, Sacramento river.
Turks landing, Sacramento river.
Union city creek, San Joaquin river.
Union house, Sacramento river.
Union iron works, San Francisco bay.
Union island, San Francisco bay.
Vallejo, San Francisco bay.
Walnut Grove, Sacramento river.
Warm springs, San Francisco bay.
West Berkeley, San Francisco bay.
Whites landing, San Joaquin river.
Woodbridge, San Joaquin river.
Yuba city, Sacramento river.

District No. 3, entitled "Northern California coast", includes the following ports and landings:

Albion, Mendocino county.
Arcata, Humboldt county.
Bodega, Sonoma county.
Bolinas, Marin county.
Bowers landing, Mendocino county.
Biblers point, Sonoma county.
Bridgeport, Humboldt county.
Buckport, Humboldt county.
Casper, Mendocino county.
Cleone, Mendocino county.
Collins landing, Mendocino county.
Crescent, Del Norte county.
Cuffey Cove, Mendocino county.
Duxbury point, Sonoma county.
Eel river, Humboldt county.
Eureka, Humboldt county.
Fields landing, Humboldt county.
Fish rock, Mendocino county.
Fisks mill, Sonoma county.
Fort Bragg, Mendocino county.
Fort Ross, Sonoma county.
Greenwood creek, Mendocino county.
Gualala, Mendocino county.
Hookton, Humboldt county.
Humboldt, Humboldt county.
Inglenook, Mendocino county.
Klamath river, Humboldt county.
Little river, Mendocino county.
Mad river, Humboldt county.
Mendocino city, Mendocino county.
Myrtle creek, Humboldt county.
Navarro, Mendocino county.
North Port, Mendocino county.
Noyo, Mendocino county.
Point Arena, Mendocino county.
Point Gorda, Humboldt county.
Point Reyes, Marin county.
Point Tomales, Marin county.
Port Kenyon, Humboldt county.
Rockport, Mendocino county.
Rough and Ready, Mendocino county.
Russian landing, Sonoma county.
Salt point, Sonoma county.
Shelter Cove, Mendocino county.
Signal point, Mendocino county.
Smiths river, Del Norte county.
South bay, Humboldt county.
Stewarts point, Sonoma county.
Stillwater Cove, Sonoma county.
Table bluff, Humboldt county.
Timber Cove, Sonoma county.
Tomales, Marin county.
Trinidad, Humboldt county.
Ussal creek, Mendocino county.
Westport, Mendocino county.
Whitesboro, Mendocino county.

District No. 4, entitled "Oregon coast," includes the following ports and landings:

Alsea bay, Benton county.
Bandon, Coos county.
Bay city, Tillamook county.
Cape Blanco, Curry county.
Cape Foulweather, Tillamook county.
Cape Gregory, Coos county.
Cape Lookout, Tillamook county.
Cape Mears, Tillamook county.
Cape Orford, Curry county.
Cape Perpetua, Benton county.
Chetco, Curry county.
Collins, Benton county.
Coos bay, Coos county.
Coos city, Coos county.
Coquille river, Coos county.
Elk city, Benton county.
Ellensburg, Curry county.
Empire city, Coos county.
Florence, Lane county.
Gardiner, Douglas county.
Garibaldi, Tillamook county.
Hobsonville, Tillamook county.
Marshfield, Coos county.
Mishawaka, Clatsop county.
Myrtle, Coos county.
Nehalem bay, Clatsop county.
Nestocton, Tillamook county.
Netarts, Tillamook county.
Newport, Benton county.
Norfolk, Douglas county.
Oretown, Tillamook county.
Oyster bay, Benton county.
Oysterville, Benton county.
Parkersburg, Coos county.
Port Orford, Curry county.
Randolph, Coos county.
Rock creek, Tillamook county.
Rogue river, Curry county.
Scottsburg, Douglas county.
Seaton, Lane county.
Shoalwater bay, Coos county.
Siletz bay, Tillamook county.
Siuslaw, Lane county.
Smiths river, Douglas county.
Sulphur springs, Douglas county.
Tillamook, Tillamook county.
Toledo, Benton county.
Umpqua river, Douglas county.
Utter city, Coos county.
Yakima, Benton county.
Yaquina, Benton county.

District No. 5, entitled "The Columbia and Willamette rivers", includes the following ports and landings:

Albany, Willamette river.
Albina, Willamette river.
Arlington, Columbia river.
Astoria, Columbia river.
Beaver, Columbia river.
Blalock, Columbia river.
Blind slough, Columbia river.
Booneville, Willamette river.
Butteville, Willamette river.
Canby, Willamette river.
Cape Disappointment, Columbia river.
Cape Horn, Columbia river.
Carroll, Columbia river.
Cascades, Columbia river.
Castle Rock, Columbia river.
Cathlamet, Columbia river.
Chinook, Columbia river.
Clackamas, Willamette river.
Clark river, Upper Columbia river.
Clatskamie river, Columbia river.
Clatsop, Columbia river.
Clifton, Columbia river.
Collis, Columbia river.
Columbia, Columbia river.
Cool creek, Columbia River.
Corvallis, Willamette river.
Coweewan, Columbia river.
Cowlitz, Columbia river.
Coyote, Columbia river.
Deep creek, Upper Columbia river.
Deer island, Columbia river.
Dodsons, Columbia river.
Eagle cliff, Columbia river.
East Portland, Willamette river.
Enterprise, Columbia river.
Eugene city, Willamette river.
Fairfield, Willamette river.
Fern Hill, Columbia river.
Fort Canby, Columbia river.
Fort Stevens, Columbia river.
Freeport, Columbia river.
Gnat creek, Columbia river.
Grays river, Columbia river.
Harringtons point, Columbia river.
Harrisburg, Willamette river.
Hess slough, Columbia river.
Hoods river, Columbia river.
Hunters point, Columbia river.
Ilwaco, Columbia river.
Independence, Willamette river.
John Days river, Columbia river.
Juniper, Columbia river.
Kalama, Columbia river.
Kelso, Columbia river.
Klakamas, Willamette river.
Klickitat, Columbia river.
Knappa, Columbia river.
Knappton, Columbia river.
La Center, Columbia river.
Lake river, Columbia river.
Lewis and Clarke river, Columbia river.
Lincoln, Willamette river.
Marshland, Columbia river.
Martins slough, Columbia river.
Millers, Willamette river.
Milton, Columbia river.
Milwaukee, Willamette river.
Mohawk, Willamette river.
Monticello, Columbia river.
Mosier, Columbia river.
Mount Coffin, Columbia river.
Oak Point, Columbia river.
Olney, Columbia river.
Oregon city, Willamette river.
Oswego, Willamette river.
Pekin, Columbia river.
Peoria, Willamette river.
Pillar rock, Columbia river.
Point Adams, Columbia river.
Portland, Willamette river.
Quinn, Columbia river.
Ranier, Columbia river.
Rays landing, Willamette river.
Rowena, Columbia river.
St. Helen, Columbia river.
St. Johns, Columbia river.
Salem, Willamette river.
Sand island, Willamette river.
Scappose, Columbia river.
Sellwood, Willamette river.
Skamokawa, Columbia river.
Skipanon, Columbia River.
Springfield, Willamette river.
Stokes, Columbia river.
The Dalles, Columbia river.
Toledo, Columbia river.
Tongue point, Columbia river.
Tualatin, Willamette river.
Umatilla, Columbia river.
Upper Columbia, Columbia river.
Vancouver, Columbia river.
Venton, Columbia river.
Wallawalla, Columbia river.
Wallula, Columbia river.
Washougal, Columbia river.
Waterford, Columbia river.
Westport, Columbia river.
Weyeth, Columbia river.
Wheatland, Willamette river.
Youngs river, Columbia river.

District No. 6, entitled "Puget sound and Washington coast", includes the following ports and landings:

Aberdeen, coast.
Anacortes, Puget sound.
Arcadia, Puget sound.
Avondale, Puget sound.
Ballard, Puget sound.
Bay city, coast.
Bellingham bay, Puget sound.
Birch bay, Puget sound.
Blaine, Puget sound.
Bruceport, coast.
Cape Flattery, coast.
Cape Johnson, coast.
Cascade bay, coast.
Caseys inlet, Puget sound.
Cedarville, coast.
Centerville, Puget sound.
Chehalis bay, coast.
Chicago, Puget sound.
Chico, Puget sound.
Chimacum, Puget sound.
Cluckamut, Puget sound.
Coburg, Puget sound.
Cosmopolis, coast.
Coupeville, Puget sound.
Coveland, Puget sound.
Crescent bay, Puget sound.
Cypress, Puget sound.
Damon, coast.
Deception bay, Puget sound.
Des Moines, Puget sound.
Dewatto, Puget sound.
Doe bay, Puget sound.
Dogfish bay, Puget sound.
Dunamish, Puget sound.
Dwamish, Puget sound.
East sound, Puget sound.
Ebeys landing, Puget sound.
Edison, Puget sound.
Edmunds, Puget sound.
Elma, coast.
Fairhaven, Puget sound.
Falls city, Puget sound.
Fidalgo, Puget sound.
Florence, Puget sound.
Freeport, Puget sound.
Friday harbor, Puget sound.
Gig harbor, Puget sound.
Grays harbor, coast.
Guemes, Puget sound.
Gull harbor, Puget sound.
Hadlock, Puget sound.
Hats slough, Puget sound.
Henderson bay, Puget sound.
Hoko, Puget sound.
Hoquiam, coast.
Humptulips, Puget sound.
Irondale, Puget sound.
Johns river, coast.
Kamilche, Puget sound.
Kanaka bay, coast.
Kirkland, Puget sound.
Laconner, Puget sound.
Lake bay, Puget sound.
Lakeview, Puget sound.
Lopes island, Puget sound.
Lowell, Puget sound.
Lumi, Puget sound.
Lyman, Puget sound.
Lynden, Puget sound.
Markham, coast.
Marysville, Puget sound.
McKay, Puget sound.
Melbourne, coast.
Minter, Puget sound.
Montesano, coast.
Mount Vernon, Puget sound.
Mukilteo, Puget sound.
Nasel, coast.
Neah bay, Puget sound.
Nesqually, Puget sound.
New Dungeness, Puget sound.
New London, Puget sound.
Nibbeville, Puget sound.
Nooksachk, Puget sound.
North cove, coast.
Oak harbor, Puget sound.
Oakland, Puget sound.
Olympia, Puget sound.
Orcas island, Puget sound.
Oysterville, coast.
Petersons point, coast.
Port Angeles, Puget sound.
Port Blakeley, Puget sound.
Port Discovery, Puget sound.
Port Gamble, Puget sound.
Port Hadlock, Puget sound.
Port Ludlow, Puget sound.
Port Madison, Puget sound.
Port Orchard, Puget sound.
Port Townsend, Puget sound.
Poulsbo, Puget sound.
Purdy, Puget sound.
Puyallup, Puget sound.
Pysht, Puget sound.
Quartermaster's harbor, Puget sound.
Quilcene, Puget sound.
Quillayute, coast.
Quinault, coast.
Renton, Puget sound.
Riparia, Snake river.
Riverside, coast.
Roche harbor, Puget sound.
St. Helens, coast.
Salmon bay, Puget sound.
Samish, Puget sound.
San Juan, Puget sound.
Seabeck, Puget sound.
Seattle, Puget sound.
Seguin, Puget sound.
Sehome, Puget sound.
Semiahmoo, Puget sound.
Shelton, Puget sound.
Sidney, Puget sound.
Skagit, Puget sound.
Skokomish, Puget sound.
Snohomish, Puget sound.
South Bend, coast.
Springbrook, Puget sound.
Stanwood, Puget sound.
Steilacoom, Puget sound.
Stillaguamish, Puget sound.
Sunshine, coast.
Tacoma, Puget sound.
Tolt, Puget sound.
Tulalip, Puget sound.
Tumwater, Puget sound.
Union city, Puget sound.
Utsaladdy, Puget sound.
Vashon, Puget sound.
Vaughn, Puget sound.
Waldron, Puget sound.
Whatcom, Puget sound.
White river, Puget sound.
Willapa, coast.
Willopah, coast.

Traffic district No. 7, entitled "Foreign", includes the ports of call and trading points embraced in the following branches: Japanese and Chinese trade; East India trade; Mexican trade: Central and South American trade; South Sea trade; Canadian trade, and European trade:

JAPANESE AND CHINESE TRADE.

Amoy, China.
Foochow, China.
Hakodate, Japan.
Hongkong. China.
Nagasaki, Japan.
Nicholasofski, Siberia.
Petropaulofski, Siberia.
Shanghai, China.
Suatow, China.
Vladivostock, Siberia.
Yokohama, Japan.

EAST INDIA TRADE.

Bangkok, Siam.
Batavia, Java.
Bombay, Hindostan.
Calcutta, Hindostan.
Madagascar island.
Manilla, Philippine islands.
Padang, Sumatra.
Pakalongon, Borneo.
Penange, Malaya.
Saigon, Cochin China.
Samarari, Philippine islands.
Singapore, Malaya.
Sourabaya, Java.

MEXICAN TRADE.

Acapulco, Guerrero.
Cape San Lucas, Lower California.
Ceros island, Lower California.
Coronado islands, Lower California.
Ensenada, Lower California.
Guaymas, Sonora.
La Paz, Lower California.
Magdalena bay, Lower California.
Manzanillo, Colima.
Mazatlan, Sinaloa.
Port Angel, Lower California.
Raza island, Lower California.
San Benito, Sinaloa.
San Blas, Jalisco.
San Quentin, Lower California.
Santa Margerita island, Lower California.
Santa Rosalie island, Lower California.
Tonala, Chiapas.

CENTRAL AND SOUTH AMERICAN TRADE.

Acajutla, Salvador.
Amapalla, Honduras.
Arico, Chile.
Autafogasta, Chile.
Balenita, Equador.
Buena Ventura, United States of Colombia.
Caldera, Chile.
Callao, Peru.
Cape Corientes, Chile.
Carra bay, Peru.
Champerico, Guatemala.
Cobija, Chile.
Colba, Guatemala.
Coquimbo, Chile.
Corinto, Nicaragua.
Guayaquil, Equador.
Huasco, Chile.
Iquique, Chile.
La Libertad, Salvador.
La Union, Salvador.
Manta, Equador.
Molendo, Peru.
Nicaragua, Guatemala.
Panama, United States of Colombia.
Pascamayo, Peru.
Payta, Peru.
Peten, Peru.
Pimental, Peru.
Pisaqua, Chile.
Pisco, Peru.
Punta Arenas, Costa Rica.
Realjo, Guatemala.
Salavari, Peru.
San José, Guatemala.
San Juan Del Sur, Nicaragua.
Tumaco, United States of Colombia.
Valparaiso, Chile.

SOUTH SEA TRADE.

Apia, Samoan islands.
Caroline islands.
Fanning islands.
Flint islands.
Friendly islands.
Gilbert islands.
Hilo, Hawaiian islands.
Homapo, Hawaiian islands.
Honolulu, Hawaiian islands.
Howland islands.
Kahului, Hawaiian islands.
Mahukona, Hawaiian islands.
Marshall islands.
Melbourne, New South Wales.
Newcastle, New South Wales.
Papeete, Society islands.
Solomon islands.
Sprecklesville, Hawaiian islands.
Sydney, New South Wales.
Tahiti, Society islands.
Tutuila, Samoan islands.

CANADIAN TRADE.

Barkley sound, British Columbia.
Bellingham bay, British Columbia.
Chemainus, Vancouver island, British Columbia.
Comox, Vancouver island, British Columbia.
Departure bay, Vancouver Island, British Columbia.
Dunsmuir, Vancouver island, British Columbia.
Moodyville, British Columbia.
Nanimo, Vancouver island, British Columbia.
New Westminster, British Columbia.
Nootka sound, British Columbia.
Port Moody, British Columbia.
Texada island, Straits of Georgia, British Columbia.
Vancouver, British Columbia.
Victoria, Vancouver island, British Columbia.

EUROPEAN TRADE.

The large European ports, the principal trading having been with Liverpool, Plymouth, London, Hull, Bordeaux, and Hamburg.

District No. 8, entitled "Atlantic ports", includes all seaports on the United States Atlantic coast.

District No. 9, entitled "Alaska coast and Bering sea", includes the following ports and trading points:

Bartlett bay.
Bristol bay.
Burroughs bay.
Chignik.
Chilkat.
Cook inlet.
Douglas island.
Etches bay.
Fin point.
Fish bay.
Fort Tongass.
Freshwater bay.
Howkan.
Juneau.
Karluk.
Killisnoo.
Klawak
Kodiak.
Labaska.
Labouchere bay.
Mitlakotla.
Morgovia.
Nichols bay.
Nushagak.
Point Hoonah.
Port Clarence.
Prince Williams sound.
Pyramid harbor.
Sitka.
Sutteshau.
Unalaska.
Uyak.
Wrangell island.
Yess bay.

PLAN OF THE TABLES.

For the presentation of the statistical results of the investigation by the Eleventh Census into the industry of transportation by water on the Pacific coast, 40 tables have been prepared, their respective numbers and titles being as follows:

Equipment, occupation, and construction:
    Table 1. Equipment of all craft.
    Table 2. Occupation and valuation by classes.
    Table 3. Ownership by classes.
    Table 4. Ownership by localities.
    Table 5. Construction by classes.
    Table 6. Construction by localities.
Traffic operations:
    Table 7. Traffic in general.
    Table 8. Freight traffic by commodities.
    Table 9. Interdistrict movement (freight).
    Table 10. Interdistrict movement (mileage).
Earnings and expenses:
    Table 11. Financial account in general.
    Table 12. Itemized expense account.
    Table 13. Employés and wages in detail.
    Table 14. Employés and wages by coast totals.
    Table 15. Fuel account.
General operations by classes:
    Table 16. Passenger and freight vessels.
    Table 17. Ferryboats.
    Table 18. Fishing vessels.
    Table 19. Harbor tugs.
    Table 20. Pilot boats.
    Table 21. Yachts and pleasure boats.
    Table 22. No traffic report.
    Table 23. Summary.
Comparative statistics:
    Table 24. Steamers and unrigged craft in 1880 and 1889.
    Table 25. Steamers by classes in 1880 and 1889.
    Table 26. Gross earnings of steamers in 1880 and 1889.
    Table 27. Steamers' crews and wages in 1880 and 1889.
    Table 28. Steamer traffic in 1880 and 1889.
    Table 29. Fleets for the 10 years, 1880–1889.
    Table 30. Aggregates and averages for the 10 years, 1880–1889 (all vessels).
    Table 31. Aggregates and averages for the 10 years, 1880–1889 (steamers).
    Table 32. Aggregates and averages for the 10 years, 1880–1889 (sailing vessels).
    Table 33. Aggregates and averages for the 10 years, 1880–1889 (unrigged craft).
    Table 34. Tonnage fluctuations for the 10 years, 1880–1889 (all craft).
    Table 35. Tonnage fluctuations for the 10 years, 1880–1889 (steamers).
    Table 36. Tonnage fluctuations for the 10 years, 1880–1889 (sailing vessels).
    Table 37. Tonnage fluctuations for the 10 years, 1880–1889 (unrigged craft).
    Table 38. Shipbuilding for the 10 years, 1880–1889 (general).
    Table 39. Shipbuilding for the 10 years, 1880–1889 (steamers).
Congressional appropriations:
    Table 40. Appropriations for the Pacific coast by localities.

EQUIPMENT AND OCCUPATION.

Table 1, "Equipment of all craft", shows the number, tonnage, and value of all steamers, sailing vessels, and unrigged craft of over five tons burden, registered or owned in the customs districts of the states of California, Oregon, and Washington, in the year ended December 31, 1889, no matter what their occupation, or whether they were in occupation or not.

Table 2, entitled "Occupation and valuation by classes", analyzes the entries of Table 1 by separating the Pacific coast fleet into classes of occupation or pursuit. The steamers are divided into five classes, namely, those engaged in the transportation of both passengers and freight, ferryboats, fishing vessels, harbor tugs, and yachts; the sailing vessels are divided into four classes: freighters, fishing vessels, pilot boats, and yachts. A separate entry is also made of those steamers and sailing vessels which made no report of traffic operations. Separate entry is also made of the barges, lighters, and scows, grouped as unrigged. For each of these classifications the number, gross tonnage, valuation, and value per gross ton are given of vessels so classified allotted to each customs district, with totals for the states and coast.

OWNERSHIP BY CLASSES.

Table 3 shows the number, tonnage, and value of all classes of vessels allotted, respectively, to individual, joint stock, and corporate ownership, the entries being grouped for each class of craft and credited separately to each customs district, with totals for the states and coast, as in the other tables of equipment.

Table 4, "Ownership by localities", treats of the same subject as Table 3, except that instead of grouping the data by classes of occupation it groups them by localities, gathering under the head of each district all the vessels of all classes forming its fleet.

CONSTRUCTION.

Table 5, "Construction by classes", shows the number, tonnage, and value of all classes of vessels, respectively, constructed of wood, composite, and iron or steel, the entries being grouped for each class of craft and credited separately to each district, with totals for the states and coast.

Table 6, "Construction by localities", bears the same relation to Table 5 that Table 4 does to Table 3; that is, instead of grouping the data of construction by classes of occupation, it groups them by localities, gathering under the head of each district all the vessels of all classes forming its fleet.

TRAFFIC.

The statistics of traffic are presented in four tables numbered from 7 to 10, inclusive. The first, Table 7, "Traffic in general", contains the number of vessels, their tonnage, trips made, number of miles covered, freight moved, and passengers carried by all freight and passenger carrying craft of the Pacific coast.

Table 8, "Freight traffic by commodities", divides the gross statement of freight carried into the principal items of classified report.

The preceding tables have all been assigned to the customs districts described in the paragraph entitled "Localities of registration, equipment, and traffic", but in the two following tables (9 and 10) the statistics of traffic operations are assigned to the traffic districts described in the same paragraph. Table 9, for instance, entitled "Interdistrict movement (freight)", shows how many tons of each commodity were moved in or between any of the six traffic districts into which the coast has been marked off, and between any of these districts and foreign ports, Atlantic ports, and the Alaska coast and the Bering sea, while Table 10 shows how many miles were covered by the vessels engaged in the transportation of this freight, the entries in each table being made in such way as to show how the traffic vessels of each port were occupied, where they went, how many tons they carried, and how many miles they traveled during the year of report.

EARNINGS AND EXPENSES.

Four tables, numbered 11 to 14, are devoted to this part of the subject. Table 11, "Financial account in general", is almost a balance sheet of the industry of water transportation on the Pacific coast, showing as it does the gross earnings, expenses, and remaining net earnings of the coast fleet reporting their income and expenditure, the entries being made for the ports of registration, with totals for states and coast.

In Table 12, entitled "Itemized expense account", the expenses of reporting vessels, following the same division of customs districts and states, are divided into the various items of port charges, wages, provisions, current repairs, fuel (for steamers), other running expenses, commissions, insurance, taxes, office expenses, and other shore expenses, these being the eleven divisions of the expenditures.

EMPLOYÉS AND WAGES.

A still further subdivision of expenses is made in Table 13, "Employés and wages in detail". Here the monthly wages paid in each district to all grades of employés on vessels engaged in the transportation of freight and passengers is given, together with the number of each class of employés making up the ordinary crews required as the complement of all the reporting craft engaged in traffic operations.

Table 14, "Employés and wages by coast totals", is really a résumé of Table 13, taking up as it does the total number of employés of each grade and the aggregate and average monthly wages paid to each of these grades on the coast for all operating vessels engaged in passenger and freight traffic on the Pacific coast, the only segregations being those of steamers and sailing vessels.

FUEL ACCOUNT.

Table 15, entitled "Fuel account", applies only to steamers, and gives the amount of coal and wood burned by the steamers operated in the customs districts, together with the cost of the same.

GENERAL OPERATIONS BY CLASSES.

In the eight tables numbered from 16 to 23, inclusive, embraced under the above head, a separate account is given of the general operations of the six classes of vessels into which they were divided in Table 2; that is, freight and passenger vessels, ferryboats, fishing vessels, harbor tugs, pilot boats, yachts, and pleasure boats, with an additional table for those craft not making any traffic report and one in résumé. The items reported on, wherever practicable, are number, tonnage, value, trips made, miles traveled, freight moved, passengers carried, gross earnings, expenses, net earnings, common seamen employed, average wages per month paid to common seamen, number making up ordinary crews, total number of men employed, and total wages paid during the year.

COMPARATIVE STATISTICS.

All the tables which have been previously considered present only what may be called the positive statistics for the year ended December 31, 1889, whereas the sixteen tables numbered inclusively 24 to 39 give the comparative statistics either for the two years 1880 and 1889 or for the ten years 1880–1889. In the first five tables the two years of report alone are taken into consideration, the items being gathered from the transportation volume issued for the census of 1880 and from the schedules of the present inquiry.

The eleven tables, 29 to 39, inclusive, have been largely made up from information furnished this office by the Commissioner of Navigation. In Table 29 there are given the figures showing the number and tonnage of all steamers, sailing vessels, and barges registered in the customs districts of the Pacific coast for the ten years 1880–1889. In Tables 30, 31, 32, and 33 the number, aggregate, and average tonnage of each steamer, sailing vessel, and barge fleet belonging to each district is given for the decade in question. Tables 34, 35, 36, and 37 give the fluctuations of the annual average number and annual average tonnage of all vessels registered in the different customs districts. Tables 38 and 39 are records of the shipbuilding for the period in question, the first giving the number and tonnage of all steamers, sailing vessels, and barges built during those years in the various customs districts, and the second furnishing the number and tonnage of all steamers built in the various districts, arranged according to their methods of propulsion; that is, whether propellers, or side-wheel or stern-wheel steamers.

CONGRESSIONAL APPROPRIATIONS.

The last of the tables (Table 40) gives the amount appropriated by Congress for the survey, improvement, and maintenance of the ports, harbors, and landings on the Pacific coast and of the rivers flowing into them, from the date of the earliest appropriation down to and including that of the act of Congress of September 19, 1890. These sums, so far as the grouping of periods is concerned, are given: first, up to and including 1879; second, from 1880 to 1889, inclusive; third, the appropriations in 1890; and fourth, the total appropriations from first to last. So far as localities are concerned, these sums are given with considerable detail, the items not only being furnished for each state but for each locality on which the government money has been spent or for which it has been appropriated.

WHAT THE TABLES SHOW.

Passing from a consideration of the plan of the tables to that of the data contained in them, and taking them up in their order, the first fact to be noticed is that on the Pacific coast, in the year ended December 31, 1889, the floating equipment numbered 1,842 craft, having a tonnage of 441,939, and an estimated commercial value as returned in the schedules of $23,067,370. Of this fleet 531 were steamers with a tonnage of 170,503 and a value of $15,526,455; 822 were sailing vessels with a tonnage of 208,080 and a value of $6,715,570, and 489 unrigged craft with a tonnage of 63,356 and a value of $825,345. Of these totals California had 251 steamers with a tonnage of 106,667 and a value of $9,792,905; 697 sailing vessels with a tonnage of 162,946 and a value of $5,753,975, and 229 unrigged craft with a tonnage of 35,273 and a value of $601,200; Oregon had 165 steamers with a tonnage of 50,628 and a value of $4,492,200; 43 sailing vessels with a tonnage of 2,776 and a value of $97,065, and 158 unrigged craft with a tonnage of 15,559 and a value of $144,100; and Washington had 115 steamers with a tonnage of 13,208 and a value of $1,241,350; 82 sailing vessels with a tonnage of 42,358 and a value of $864,530, and 102 unrigged craft with a tonnage of 12,524 and a value of $80,045. As will be seen by examining Table 1, the particulars of the fleets are given for each of the 9 customs districts located in the states of California, Oregon, and Washington, the relative importance of each of these districts being clearly shown by their entries. That of San Francisco preponderates, its fleet numbering 1,018 out of a total of 1,842, its tonnage amounting to 289,750 out of a total of 441.939, and the value of its fleet reaching $15,400,205 out of a total of $23,067,370. It must be remembered that the figures for the district of Puget sound (299 craft with a tonnage of 68,090 and a value of $2,185,925) really cover all the shipping belonging to the state of Washington, while in Oregon there are four districts, three of which, southern Oregon, Oregon, and Willamette, respectively, represent the ports of Coos bay, Astoria, and Portland, the fleet of southern Oregon standing at 109 craft, with a tonnage of 3,887 and a value of

$99,290; that of Oregon being 105, with a tonnage of 5,353 and a value of $347,990, and that of Willamette being 136, with a tonnage of 57,402 and a value of $3,998,485. This large value of the Portland fleet is due to the fact that out of its whole fleet 96 are steamers with a value of $3,850,100, while Astoria has only 41 steamers with a value of $284,100, and Coos bay 15 steamers with a value of $70,600.

In Table 2 the 1,842 craft which constituted the total fleet of the Pacific coast are divided into their classes of occupation or pursuit, entries being made to show the number, gross tonnage, gross valuation, and value per ton of passenger and freight boats, sail and steam, ferryboats, harbor tugs, pilot boats, pleasure craft, fishing vessels, unrigged craft, and those miscellaneous vessels which furnished no report of traffic operations. From the figures so presented the following summarized results are obtained:

TABLE B.—SUMMARY SHOWING THE NUMBER, GROSS TONNAGE, AND ESTIMATED COMMERCIAL VALUE OF THE PRINCIPAL CLASSES OF VESSELS OWNED ON THE PACIFIC COAST IN 1889.

CLASSES OF VESSELS.	Number of vessels.	Gross tonnage.	Valuation.
Total	1,842	441,939	$23,067,370
Steamers	531	170,503	15,526,455
Passenger and freight	354	129,491	12,660,755
Ferry	38	24,630	979,300
Fish	24	4,343	411,500
Harbor tugs	70	6,109	1,120,800
Yachts	3	63	6,500
No traffic report	42	5,867	347,600
Sailing vessels	822	208,080	6,715,570
Freight	647	194,478	6,112,340
Fish	60	6,372	280,955
Pilot boats	9	418	49,700
Yachts	25	612	69,300
No traffic report	81	6,200	203,275
Unrigged craft	489	63,356	825,345

Material will also be found in Table 2 for a calculation showing the average tonnage, average commercial value, and average value per ton of the ten classes mentioned; and in the accompanying summary these averages will be found worked out for the six principal classes of vessels, the miscellaneous class here including yachts, fishing vessels, and those vessels for which no traffic was reported.

TABLE C.—SUMMARY SHOWING THE NUMBER, AVERAGE TONNAGE, AVERAGE VALUE PER VESSEL, AND AVERAGE VALUE PER GROSS TON OF THE PRINCIPAL CLASSES OF VESSELS OWNED ON THE PACIFIC COAST IN 1889.

CLASSES OF VESSELS.	Number of vessels.	Average tonnage.	Average commercial value.	Average value per gross ton.
Total	1.842	240	$12,523	$52.20
Steamers	531	321	29,240	91.06
Passenger and freight	354	366	35,765	97.77
Ferry	38	648	25,771	39.76
Harbor tugs	70	87	16,011	183.47
Miscellaneous	69	149	11,096	74.53
Sailing vessels	822	253	8,170	32.27
Freight	647	301	9,447	31.43
Pilot boats	9	46	5,522	118.90
Miscellaneous	166	79	3,335	41.98
Unrigged craft	489	130	1,688	13.03

VALUES.

It will be seen from this summary that the largest average tonnage was that of the ferryboats, 648, and that the sailing vessels and steamers engaged in freighting business ran very close in their average tonnage, the figures being respectively 301 and 366. The average value of these freighters, however, differed very materially, for, while the average value of the steam freighters was $97.77 per gross ton, that of the sailing vessels was only $31.43, the larger value of the steamers being due to the presence of machinery. It will be observed, too, in looking at Table 2, that the value per gross ton of passenger and freight steamers by no means keeps on an even basis in all localities, the lowest being in the Humboldt district, where the average value per gross ton was $63.19, and the highest being at Wilmington, where it was $197.75. The schedule calls for the "estimated commercial value", and the figures set down ran high or low according to the basis upon which the estimator placed his value. In some cases a man estimated his vessel at what it cost, in another case he estimated it only at what it would realize in sale; the insurance men had their estimate, while in many other cases the idea was rigidly held that the values would be used as a basis for taxation. The average value per gross ton of steam passenger and freight boats has been figured up to be $97.77, and this, as in the case of the coast estimate for nearly all the classes, may be accepted as a reasonably close one.

With the exception of the ferryboats, the average value per ton of the principal classes of vessels on the Atlantic coast and Gulf of Mexico agrees very closely with that which has been arrived at on the Pacific coast. On the Atlantic coast the average value per gross ton of passenger and freight steamers is $75.81, while on the Pacific coast it is $97.77; that of harbor tugs on the Atlantic coast is $166.29, while on the Pacific coast it is $183.47. That of the sailing freighters on the Atlantic coast is $30.77, while on the Pacific coast it is $31.43, a difference of but 66 cents per ton. The parallelism of average is still closer in the case of the unrigged craft, that on the Atlantic coast being $12.57 and on the Pacific coast $13.03, a difference of but 46 cents per ton.

OWNERSHIP.

The statistics of ownership are only given for the 1,353 steamers and sailing vessels of the Pacific coast fleet, the data being grouped in Table 3 according to the various classes and in Table 4 according to the various localities. The ownership is treated under the three heads of individual, joint stock, and corporate, the number, aggregate tonnage, and valuation of each class of craft being given under each of these heads. It is seen from Table 3, for example, that of the 531 steamers of the Pacific coast 252 were owned by individuals, and that the tonnage and valuation of these individually owned steamers were 34,114 and $3,147,650; that 25 of them, with a tonnage of 3,368 and a value of $324,500, were owned by joint stock companies, and that the remaining 254, with a tonnage of 133,021 and a value of $12,054,305, were owned by corporations. Of the 822 sailing vessels 742, with a tonnage of 166,591 and a value of $5,853,465, were owned by individuals; 78, with a tonnage of 40,855 and a value of $843,105, were owned by corporations, only 2, with a tonnage of 634 and a value of $19,000, were owned by joint stock companies. Putting the steam and sail together, this will mean that out of the total fleet 994, with a tonnage of 200,705 and a value of $9,001,115, were owned by individuals; that 27, with a tonnage of 4,002 and a value of $343,500, were owned by joint stock companies, and that 332, with a tonnage of 173,876 and a value of $12,897,410, were controlled by corporate ownership. The excess in the average tonnage of corporate owned vessels over those owned by individuals and joint stock companies is plainly set down in the subjoined summary:

TABLE D.—SUMMARY SHOWING THE AVERAGE TONNAGE OF STEAMERS AND SAILING VESSELS ON THE PACIFIC COAST OWNED BY INDIVIDUALS, JOINT STOCK COMPANIES, AND CORPORATIONS.

CLASSES OF VESSELS.	AVERAGE TONNAGE PER VESSEL BY OWNERSHIP.		
	Individual.	Joint stock.	Corporation.
Total	202	148	524
Steamers	135	135	524
Sailing vessels	225	317	524

The relative character of the corporate ownership is also to be seen in the columns of valuation, where it is shown that the value of the vessels so owned stands at $12,897,410, or $3,552,795 over and above the combined valuation of vessels owned by individuals and joint stock companies. In the subjoined summary are presented the totalized figures of number, tonnage, and value by ownership of each class of steamers and sailing vessels:

TABLE **E.**—SUMMARY SHOWING THE TOTALS OF NUMBER, TONNAGE, AND VALUE FOR EACH CLASS OF VESSELS ON THE PACIFIC COAST, GROUPED UNDER THE HEAD OF INDIVIDUAL, JOINT STOCK, AND CORPORATE OWNERSHIP.

CLASSES OF VESSELS.	Total number of vessels.	NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
		Individual.		Joint stock.		Corporate.		Individual.	Joint stock.	Corporate.
		Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
Total	1,353	994	200,705	27	4,002	332	173,876	$9,001,115	$343,500	$12,897,410
Steamers	531	252	34,114	25	3,368	254	133,021	3,147,650	324,500	12,054,305
Passenger and freight	354	179	27,140	18	2,825	157	99,526	2,417,850	246,500	9,996,405
Ferry	38	7	202	2	216	29	24,212	28,600	13,000	937,700
Fish	24	5	626	2	149	17	3,568	45,000	24,000	342,500
Harbor tugs	70	33	2,189	3	178	34	3,742	440,800	41,000	639,000
Yachts	3	2	45			1	18	4,000		2,500
No traffic report	42	26	3,912			16	1,955	211,400		136,200
Sailing vessels	822	742	166,591	2	634	78	40,855	5,853,465	19,000	843,105
Freight	647	587	157,048	1	594	59	36,836	5,369,835	15,000	727,505
Fish	60	46	4,084	1	40	13	2,248	199,555	4,000	77,400
Pilot boats	9	8	354			1	64	39,700		10,000
Yachts	25	25	612					69,300		
No traffic report	81	76	4,493			5	1,707	175,075		28,200

Table 4 presents the figures of Table 3 grouped according to localities; that is, to each of the nine districts of the coast it allots the various classes of vessels and enters them up by number, tonnage, and value, according to ownership, and the substance of what is there presented may be adequately arrived at by those not interested in details through a study of the following summary table:

TABLE **F.**—SUMMARY SHOWING THE TOTALS OF NUMBER, TONNAGE, AND VALUE OF THE FLEET OF EACH DISTRICT ON THE PACIFIC COAST, GROUPED UNDER THE HEAD OF INDIVIDUAL, JOINT STOCK, AND CORPORATE OWNERSHIP.

CUSTOMS DISTRICTS.	Total number of vessels.	NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
		Individual.		Joint stock.		Corporate.		Individual.	Joint stock.	Corporate.
		Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
Total	1,353	994	200,705	27	4,002	332	173,876	$9,001,115	$343,500	$12,897,410
Steamers	531	252	34,114	25	3,368	254	133,021	3,147,650	324,500	12,054,305
San Diego, California	8	2	29			6	771	8,500		54,000
Wilmington, California	10	2	48			8	885	7,500		181,000
San Francisco, California	223	78	16,533	15	2,656	130	84,960	1,674,500	227,000	7,557,965
Humboldt, California	10	8	598			2	187	71,500		11,000
Southern Oregon, Oregon	15	11	485	3	173	1	113	44,100	22,500	4,000
Yaquina, Oregon	13	10	2,010			3	271	210,400		77,000
Oregon, Oregon	41	26	2,083	3	121	12	968	185,100	17,000	82,000
Willamette, Oregon	96	35	5,480	2	216	59	38,708	370,400	13,000	3,466,700
Puget sound, Washington	115	80	6,848	2	202	33	6,158	575,650	45,000	620,700
Sailing vessels	822	742	166,591	2	634	78	40,855	5,853,465	19,000	843,105
San Diego, California	21	19	319			2	142	21,975		15,000
Wilmington, California	13	13	694					37,400		
San Francisco, California	649	601	145,766	1	594	47	12,159	5,060,300	15,000	358,800
Humboldt, California	14	14	3,272					245,500		
Southern Oregon, Oregon	1	1	90					8,000		
Oregon, Oregon	36	35	626			1	64	40,080		10,000
Willamette, Oregon	6	6	1,996					38,985		
Puget sound, Washington	82	53	13,828	1	40	28	28,490	401,225	4,000	459,305

STATISTICS OF CONSTRUCTION.

Tables 5 and 6 present the same statistics, but in two methods. They correspond in the plan of their presentation with Tables 3 and 4. The first takes up each class as a group and for each of the districts on the coast enters up the number, tonnage, and value for each material of construction, whether wood, composite, or iron and steel; while in Table 6 the facts connected with materials of construction are assigned to localities. The figures of the tables show that iron and steel are not yet largely used as materials of construction on the Pacific coast, only 25 of the entire fleet of sailing vessels and steamers being so constructed, while vessels of composite construction are almost unknown. However, such vessels as are constructed of iron and steel are of unusually large tonnage. The following summary table shows how much larger is the average tonnage of vessels built of these materials than the average tonnage of vessels built of wood or composite:

TABLE G.—SUMMARY SHOWING THE AVERAGE TONNAGE AND AVERAGE VALUE PER TON OF VESSELS CONSTRUCTED OF WOOD, COMPOSITE, AND IRON AND STEEL.

CLASSES OF VESSELS.	MATERIALS OF CONSTRUCTION.					
	Wood.		Composite.		Iron and steel.	
	Average tonnage.	Average value per ton.	Average tonnage.	Average value per ton.	Average tonnage.	Average value per ton.
Total	247	$46.86	649	$84.75	1,968	$137.33
Steamers	240	71.85	1,089	91.83	2,009	139.34
Sailing vessels	252	32.22	209	47.85	997	40.12

In the subjoined summary the main facts of the relative size and value of the different classes of craft constructed of the materials under consideration are given:

TABLE H.—SUMMARY SHOWING THE TOTALS OF NUMBER, TONNAGE, AND VALUE OF EACH CLASS OF VESSELS ON THE PACIFIC COAST, WHETHER CONSTRUCTED OF WOOD, COMPOSITE, OR IRON AND STEEL.

CLASSES OF VESSELS.	NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.		
	Wood.		Composite.		Iron and steel.		Wood.	Composite.	Iron and steel.
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
Total	1,326	328,076	2	1,298	25	49,209	$15,373,960	$110,000	$6,758,065
Steamers	506	121,202	1	1,089	24	48,212	8,708,390	100,000	6,718,065
Passenger and freight	336	82,262	1	1,089	17	46,140	6,162,690	100,000	6,398,065
Ferry	37	24,215	....	....	1	415	939,300	....	40,000
Fishing	24	4,343	....	....	....	....	411,500	....	....
Harbor tugs	66	5,540	....	....	4	569	985,800	....	135,000
Yachts	3	63	....	....	....	....	6,500	....	....
No traffic report	40	4,779	....	....	2	1,088	202,600	....	145,000
Sailing vessels	820	206,874	1	209	1	997	6,665,570	10,000	40,000
Freight	645	193,272	1	209	1	997	6,062,340	10,000	40,000
Fish	60	6,372	....	....	....	....	280,955	....	....
Pilot boats	9	418	....	....	....	....	49,700	....	....
Yachts	25	612	....	....	....	....	69,300	....	....
No traffic report	81	6,200	....	....	....	....	203,275	....	....

TRAFFIC OPERATIONS.

From Table 7 it is seen that during the year of report the traffic movement of the Pacific coast fleet making returns amounted to 8,818,363 tons and 4,019,329 passengers. This traffic, it should be understood, is made up of that carried by steam or sailing vessels regularly engaged in the transportation of freight and passengers; the freight moved by towboats in freight laden lighters, scows, and other unrigged craft, together with lumber rafts, the traffic operations in this case being credited to the steamers doing the towing; that moved by unrigged craft, which was not reported on by any towing steamer, and which is therefore entered up as a separate account; the freight and passengers carried on ferryboats, with the exception of the traffic movement of the railroad ferryboats, and the freight traffic of those vessels owned by fishing concerns, but employed either to carry provisions and appliances to the men on the fishing grounds or to bring back their fish catch, and those engaged in carrying raw salmon to and bringing the canned fish from the canneries.

The ferryboats, independent of railroads, had a traffic of 14,772 tons freight and 2,639,095 passengers, these figures being included in the 8,818,363 tons freight and the 4,019,329 passengers, the traffic operations forming the base of this report. The railroad ferryboats carried 2,431,564 tons freight and 11,652,764 passengers, these figures being included in the report of "Transportation by railroads".

The railroad ferry business is not the only addition that should be made to the traffic report of the Pacific coast transportation by water. Another large set of figures is found in the freight movement of the steamers and sailing vessels registered in Atlantic ports but engaged wholly or partially in business on the Pacific coast. The steamers belonging to this class are those which form the western fleet of the Pacific Mail Steamship Company. These steamers were 10 in number, their terminals being San Francisco and Panama and San Francisco and Chinese ports, so that their freight movement distinctly belongs to the Pacific; whereas, from the fact that their home port is New York, the rules under which the census investigation was conducted required that that port should be credited with their equipment and income and expenditure. The freight and passenger movement, however, is to be credited to San Francisco, and is given in the following statement:

PACIFIC MAIL STEAMSHIP COMPANY'S FREIGHT AND PASSENGER TRAFFIC ON ITS PACIFIC OCEAN SERVICE IN 1889.

FREIGHT.	TONS.	
Through New York and through San Francisco freight via Panama	27, 808	
Outward freight from San Francisco to Mexico and Central American coast points	20, 041	
Inward freight to San Francisco from coast points	39, 204	
Total freight, Panama line		87, 053
Outward freight to China and Japan seas	20, 709	
Inward freight to San Francisco from China and Japan seas	35, 701	
Total freight, China line		56, 410
Total freight, both lines		143, 463

PASSENGERS.	NUMBER.
Outward bound passengers, both lines	5, 539
Inward bound passengers, both lines	4, 614
Total passengers, both lines.	10, 153

In connection with these figures should be mentioned $1,550,665 of treasure carried outward from San Francisco and $80,788 brought inward on the Panama line, and $6,905,541 of treasure carried outward from San Francisco and $250,000 brought to San Francisco on the China line, a total treasure movement of $8,786,994, of which $8,456,206 were taken out and $330,788 were brought in.

The sailing vessels hailing from Atlantic home ports but conducting all or some portion of their operations in Pacific waters were 86 in number, distributed among Maine, Massachusetts, and New York ports as follows:

Belfast, Maine	1	Wiscasset, Maine	1	Portland, Maine	3
Searsport, Maine	3	Waldoboro, Maine	3	Boston, Massachusetts	12
Thomaston, Maine	5	Damariscotta, Maine	3	New Bedford, Massachusetts	4
Camden, Maine	3	Bath, Maine	28	New York, New York	20

These vessels did a general freighting business during 1889, and that part of it which is credited to the Pacific coast includes the freighting between domestic Pacific ports or from domestic Pacific to foreign ports; that is, it covers such operations as the carrying of wheat from San Francisco, California, to Liverpool, England, or from Portland, Oregon, to Hull, England; the carrying of lumber from Port Townsend, Washington, to Buenos Ayres, South America, or of sulphur from Yokohama, Japan, to San Francisco, California. In the conduct of this business these vessels made 686 trips, sailed over 1,240,533 miles, and carried 296,299 tons of merchandise.

In a computation conducted upon the lines laid down for this report mention should also be made of those craft trading to Pacific coast ports flying foreign flags but chartered by American concerns or individuals. The port of San Francisco presents eight examples of this kind. Two of these (steamers) sailed, respectively, under the Mexican and Hawaiian flags, and were engaged in bringing coal (some 8,000 tons) from Nanaimo, British Columbia, to San Francisco. Three other steamers formed the fleet of the Occidental and Oriental Steamship Company. They were under charter from an English company, and in 1889 carried out 25,589 tons of merchandise and $10,218,525 of treasure and brought in 44,686 tons of merchandise and $10,229,225 of bullion. In addition to this the Occidental and Oriental Steamship Company in 1889 carried 20,288 passengers. Two other steamers carried the Hawaiian flag and ran from San Francisco in the Australian and Sandwich islands trade, their operations standing for the movement of 34,887 tons of merchandise. The last example was a sailing vessel, and also flew the Hawaiian flag, but her operations could not be learned.

An addition to the above account of freight moved comes from an investigation into the towing business, not that of the towing of vessels in or out of harbor, but (1) the towing of barges, lighters, etc., and (2) the towing of logs and other lumber. It should be repeated here that the 314,597 tons of freight set down in Table 7 as the work of the unrigged do not stand as the total freight movement of the 489 unrigged, but only as the freight movement not reported by the steamers furnishing the motive power for these unrigged craft; and it is certain that, although a very great deal of towed freight is covered in the report of the steamers towing, the 314,597 tons of freight not so covered by no means make up the balance of freight moved in unrigged craft on the Pacific coast in 1889. There are two reasons for this:

(1) In the California ports comparatively little towing is done and the reports can be looked upon as reasonably complete; but in the northern rivers and on Puget sound the conditions are quite different. On Puget sound, for example, the commodities towed were chiefly farm produce, lumber, brick, stone, and lime. As a rule the barges and scows on which these commodities were placed are loaded by the shipper, while in very many cases these barges are owned by farmers, produce dealers, lumbermen, and those living generally along the sound. The same remarks may be applied to the barge business of the Columbia and Willamette rivers, of Shoalwater bay, and of rivers tributary or neighboring to these waterways. In order to get a certain base for an estimate a special attempt was made to secure full returns of the unrigged craft in Coos bay district. This, by the kind assistance of the collector of customs at that place, was satisfactorily accomplished, and the result is embodied in Table 7. Altogether, figuring on such estimates as these from direct but general information and from the reports of steamer captains, it would be a legitimate and proper calculation to add a freight movement of at least 700,000 tons to the unrigged business of the Pacific coast.

(2) Besides towing barges the steamboats of the northern ports were used for towing logs and rafts of lumber. Very diligent efforts were made from the outset to secure a full report of the amount of logs so towed, but it was found an impossibility, and it can be reasonably affirmed that in the schedules of Coos bay, Port Townsend, Astoria, Yaquina, Portland, and Eureka there should be 1,500,000 tons of logs, in round numbers, that do not find a place there.

DETAILS OF COMMODITIES.

An analysis of Pacific coast freight traffic can only be made of the 8,818,363 tons of freight whose movement was reported on in the census schedules. The first step in this analysis will be found in Table 8, in the form of a subdivision of this gross amount into the six following principal classes of commodities: agricultural products, coal, products of mines and quarries, lumber and other forest products, animal products including fish, manufactures and general merchandise.

The agricultural products include the yield alike of field, orchard, and garden, both at home and abroad.

The products of mines and quarries include rock, gravel (largely used in the manufacture of artificial stone pavement), ore, building stone, and salt.

Lumber and other forest products include match wood, railroad ties, piles, charcoal, and tan bark.

Animal products include live stock, wool, hides, fish, whale oil, seal skins, otter skins, dogfish oil, elk hides, elk horn, and kindred articles.

Manufactures and general merchandise include all such commodities as were returned by their carriers in the lump sum.

The Panama steamers brought as inward freight from Mexican and Central American ports to San Francisco sugar, coffee, cocoa, cochineal, limes, hides, skins, and ores; the freight taken to southern ports from San Francisco includes boilers, barbed wire and wire goods, beef and pork, car and railroad materials, canned goods, provisions, lumber, machinery, nails, live stock, silk goods, and wheat; the materials brought from China to San Francisco by the Pacific Mail Steamship Company's steamers consisted chiefly of beans, Java coffee, curios, indigo, gunny bags, hemp, jute, opium, rice, silk goods and raw silk, spices, manilla sugar, tea and tea dust, chowchow, bamboo, matting, plants and trees, rattan, tapioca, and tobacco; and the commodities carried from San Francisco to China and Japan consisted chiefly of animals, poultry, pearl barley, beans and peas, canned goods, flour, fruit and vegetables, ginseng, grain, groceries, hay, horns and hoofs, leather, lumber, machinery and castings, oil, quicksilver, shrimps and shrimp shells (sometimes running as high as 500 tons per steamer), dried fish, old junk (especially wire rope used for making nails), old glass (for glazing purposes), abalones, clocks (once a large trade), and corpses.

Omitting the 1,754,001 tons of manufactures and general merchandise, it will be seen that the largest commodity movement was in lumber and other forest products, the figures standing at 4,239,656 tons. Next come agricultural products, 1,152,100 tons, closely followed by coal, 1,075,600 tons. The last item, with the exception of animal products, fish, etc., which has already been referred to, is mines and quarries, the products of these amounting to 522,497 tons. Of these totals, the steamers moved 851,041 tons of agricultural products, 407,635 tons of coal, 305,551 tons of the products of mines and quarries, 3,023,547 tons of lumber and other forest products, 30,706 tons of animal products, and 1,123,460 tons of manufactures and general merchandise. Sailing vessels carried 262,559 tons of agricultural products, 627,995 tons of coal, 214,946 tons of the products of mines and quarries, 1,154,325 tons of lumber and other forest products, 43,803 tons of animal products, and 458,198 tons of manufactures and general merchandise. On the unrigged craft there was carried, over and above that reported by the steamers furnishing the motive power, 38,500 tons of agricultural products, 39,970 tons of coal, 2,000 tons of the products of mines and quarries, 61,784 tons of lumber and other forest products, and 172,343 tons of manufactures and general merchandise.

INTERDISTRICT TRAFFIC.

The figures of Table 8 are valuable only as showing the amount of freight moved by the fleets belonging to each of the customs districts and must not be taken as showing the traffic of any one port. It was to arrive at this result that the scheme of interdistrict movement, described on page 12, has been formulated and carried out. This is shown in detail in Tables 9 and 10. In these tables the 8,818,363 tons of freight, whose components were shown in Table 8, still form the total, and the entries show whither this freight was carried, whence it was brought, and how many miles were covered in its distribution. The entries were made so as to show the traffic movement of steamers with their unrigged consorts, of sailing vessels, and of the combined fleet for each district, while the same classification of commodities obtains in Table 9 that was observed in Table 8. The entries show that in nearly every case the vessels of each district traveled far in the disposition of their freight. It will be seen in the entries for the San Francisco fleet, for instance, that some of the vessels of that district carried 1,651 tons of coal and 896 tons of other products from points in Puget sound to other points in Puget sound, and that they traveled 724 miles in so doing; that other San Francisco vessels carried 61,764 tons of lumber from Puget sound to foreign ports and covered 228,285 miles in the traffic; that other San Francisco vessels traveled between ports on the Oregon coast and ports on the southern California coast, carrying 6,576 tons of lumber and 220 tons of agricultural products, the distance of their voyages being 29,188 miles; that others sailed between southern California coast points and points in Alaska and the Bering sea, carrying 638 tons of general merchandise, and sailing 2,400 miles; and that others traded between foreign ports and foreign ports, carrying 24,916 tons of coal, 12,612 tons of lumber, 230 tons of animal products and fish, and 900 tons of other merchandise, and traveled 166,363 miles in this trade.

By internal traffic is meant the freight movement within the six coast districts, that is, from point to point in the districts embracing (1) southern California coast, (2) San Francisco bay and tributary rivers, (3) northern California coast, (4) Oregon coast, (5) Columbia and Willamette rivers, and (6) Puget sound and the sea coast of Washington.

By coastwise traffic is meant the freight movement between the points of any two of the coast districts described above.

By Atlantic traffic is meant the freight movement between United States Pacific and Atlantic coast points.

By foreign traffic is meant the freight movement between foreign ports and any other port, including trade between foreign port and foreign port.

By Alaska and Bering sea traffic is meant the freight movement between points on the Alaskan coast or Bering sea and any of the six coast districts.

The proposed segregation of freight movement under these heads is given in the following summary:

TABLE I.—SUMMARY SHOWING THE AMOUNT OF FREIGHT CARRIED AND MILES TRAVELED IN THE INTERDISTRICT TRAFFIC OF THE PACIFIC COAST, GROUPED UNDER THE HEADS OF INTERNAL, COASTWISE, ATLANTIC, FOREIGN, AND ALASKA AND BERING SEA TRADE.

INTERNAL TRAFFIC.

WITHIN THE—	NUMBER.	
	Tons.	Miles.
Total	5,634,151	5,733,186
1 Southern California coast district	183,594	75,782
2 San Francisco bay and rivers district	2,043,051	2,526,889
3 Northern California coast district	174,536	41,957
4 Oregon coast district	206,742	133,374
5 Columbia and Willamette rivers district	590,405	1,207,394
6 Puget sound and Washington district	2,435,823	1,747,790

TABLE I.—SUMMARY SHOWING THE AMOUNT OF FREIGHT CARRIED AND MILES TRAVELED IN THE INTERDISTRICT TRAFFIC OF THE PACIFIC COAST, ETC.—Continued.

COASTWISE TRAFFIC.

FROM—	TO—	Tons.	Miles.
Total coastwise traffic		2, 372, 825	3, 153, 432
Total		163, 442	230, 792
1 Southern California coast	2 San Francisco bay and rivers	161, 308	134, 485
1 Southern California coast	4 Oregon coast	27	17, 305
1 Southern California coast	5 Columbia and Willamette rivers	1, 942	19, 632
1 Southern California coast	6 Puget sound and Washington	165	59, 370
Total		483, 825	1, 234, 290
2 San Francisco bay and rivers	1 Southern California coast	320, 967	134, 485
2 San Francisco bay and rivers	3 Northern California coast	39, 883	328, 366
2 San Francisco bay and rivers	4 Oregon coast	44, 632	169, 264
2 San Francisco bay and rivers	5 Columbia and Willamette rivers	14, 293	38, 933
2 San Francisco bay and rivers	6 Puget sound and Washington	64, 050	563, 242
Total		623, 417	544, 433
3 Northern California coast	1 Southern California coast	98, 783	211, 574
3 Northern California coast	2 San Francisco bay and rivers	522, 434	328, 797
3 Northern California coast	5 Columbia and Willamette rivers	1, 260	2, 080
3 Northern California coast	6 Puget sound and Washington	940	1, 982
Total		209, 845	238, 302
4 Oregon coast	1 Southern California coast	17, 276	52, 539
4 Oregon coast	2 San Francisco bay and rivers	191, 255	172, 293
4 Oregon coast	5 Columbia and Willamette rivers	1, 102	4, 422
4 Oregon coast	6 Puget sound and Washington	212	9, 048
Total		68, 364	216, 667
5 Columbia and Willamette rivers	1 Southern California coast	11, 418	20, 647
5 Columbia and Willamette rivers	2 San Francisco bay and rivers	42, 720	155, 905
5 Columbia and Willamette rivers	3 Northern California coast	2, 445	1, 094
5 Columbia and Willamette rivers	4 Oregon coast	4, 085	16, 722
5 Columbia and Willamette rivers	6 Puget sound and Washington	7, 696	22, 299
Total		823, 932	688, 948
6 Puget sound and Washington	1 Southern California coast	47, 595	87, 290
6 Puget sound and Washington	2 San Francisco bay and rivers	773, 484	563, 241
6 Puget sound and Washington	3 Northern California coast	321	2, 630
6 Puget sound and Washington	4 Oregon coast	400	9, 048
6 Puget sound and Washington	5 Columbia and Willamette rivers	2, 132	26, 739

ATLANTIC TRAFFIC.

FROM—	TO—	Tons.	Miles.
Total		5, 550	30, 250
2 San Francisco bay and rivers	8 Atlantic ports	(a)	13, 250
8 Atlantic ports	2 San Francisco bay and rivers	5, 550	17, 000

FOREIGN TRAFFIC.

FROM—	TO—	Tons.	Miles.
Total foreign traffic		707, 085	2, 811, 896
Total		278, 997	1, 392, 720
1 Southern California coast	7 Foreign ports	4, 720	62, 374
2 San Francisco bay and rivers	7 Foreign ports	138, 043	785, 596
3 Northern California coast	7 Foreign ports	12, 789	74, 573
4 Oregon coast	7 Foreign ports	1, 160	9, 185
5 Columbia and Willamette rivers	7 Foreign ports	3, 286	23, 782
6 Puget sound and Washington	7 Foreign ports	115, 238	418, 305
8 Atlantic ports	7 Foreign ports	3, 560	16, 155
9 Alaska and Bering sea	7 Foreign ports	201	2, 750

(a) Ballast.

Table I.—SUMMARY SHOWING THE AMOUNT OF FREIGHT CARRIED AND MILES TRAVELED IN THE INTERDISTRICT TRAFFIC OF THE PACIFIC COAST, ETC.—Continued.

FOREIGN TRAFFIC—Continued.

FROM—	TO—	Tons.	Miles.
Total		389,310	1,250,287
7 Foreign	1 Southern California coast	39,504	82,211
7 Foreign	2 San Francisco bay and rivers	319,880	782,505
7 Foreign	5 Columbia and Willamette rivers	5,448	30,873
7 Foreign	6 Puget sound and Washington	18,718	328,111
7 Foreign	8 Atlantic ports	3,136	16,155
7 Foreign	9 Alaska and Bering sea	2,534	10,432
7 Wholly foreign		38,778	168,889

ALASKA AND BERING SEA TRAFFIC.

FROM—	TO—	Tons.	Miles.
Total Bering sea traffic		98,752	544,751
Total		50,795	288.589
1 Southern California coast	9 Bering sea	638	2,400
2 San Francisco bay and rivers	9 Bering sea	49,357	234.830
5 Columbia and Willamette rivers	9 Bering sea	(a)	25,900
6 Puget sound and Washington	9 Bering sea	800	25,459
Total		47,774	245,546
9 Bering sea	2 San Francisco bay and rivers	45,946	234,831
9 Bering sea	6 Puget sound and Washington	1.828	10,715
9 Bering sea	9 Bering sea	183	10,616

a Ballast.

From the preceding summary it will be seen that the whole internal traffic amounted to the movement of 5,634,151 tons, and that while the internal trade of the San Francisco bay and rivers amounted to 2,043,051 tons, that of Puget sound district was even greater, amounting to 2,435,823 tons.

In considering the coastwise trade it will be seen that from points on the southern California coast to all other points on the Pacific coast there were sent out 163,442 tons; from points on the San Francisco bay and rivers, 483,825 tons; from the northern California coast, 623,417 tons; from the Oregon coast, 209,845 tons; from the Columbia and Willamette rivers, 68,364 tons, and from Puget sound, 823,932 tons, making a total of 2,372,825 tons of freight. This shows that the district from which the greatest coastwise trade emanated was No. 6, Puget sound and Washington. The explanation of this is found in the 773,484 tons of freight brought from Puget sound to San Francisco made up of 40,909 tons of coal and 167,850 tons of lumber. The next largest coastwise trade is that emanating from district No. 3, northern California coast, the bulk of this being 522,434 tons of freight, mostly lumber, brought to San Francisco.

The trade between Pacific coast ports and Atlantic ports was confined on the Pacific side to San Francisco, and even in this case the business done in American vessels registered in San Francisco was only one of imports, the 5,550 tons of freight received being general merchandise.

The foreign trade amounted to 707,085 tons, made up of 278,997 tons of exports, 389,310 tons of imports, and 38,778 tons of wholly foreign movement. As might naturally be expected from its importance, San Francisco stands first in the figures of exports and imports, these being respectively 138,043 and 319,880 tons. Puget sound stands next in importance as an exporter, the figures being 115,238 tons, although its imports fall to 18,718 tons. In the case of San Francisco, the exports are made up of coal, lumber, agricultural products, and general merchandise, while in the case of Puget sound they are comprised almost entirely of coal and lumber.

The Alaska and Bering sea trade is almost equally divided between exports and imports, the first being 50,795 tons, and the second 47,774 tons. With the exception of 638 tons of general merchandise taken by San Francisco vessels plying from southern California ports, and 800 tons of lumber taken in San Francisco vessels from Puget sound, all the trade to Alaska and Bering sea was conducted by San Francisco vessels plying from San Francisco. The trade from Alaska and Bering sea was mostly with San Francisco, the two great commodities being coal and animal products including fish.

MILEAGE.

The relation of the mileage of this traffic to the freight movement is very distinctly shown in the accompanying summary giving the freight moved, distance covered, and average distance of movement per ton of each class of traffic. The distance covered in the movement of the 5,634,151 tons of freight constituting the internal traffic was 5,733,186 miles, or an average movement per ton of 1.02 miles. The distance traveled in the coastwise traffic movement was 3,153,432 miles and the freight moved 2,372,825 tons, this giving an average movement per ton of 1.33 miles. The distance covered in the foreign freight traffic was 2,811,896 miles, or an average movement per ton of 3.98 miles. The average distance in the Atlantic business was even greater, being 5.45 miles, but this large average is due to the fact that of the 30,250 miles traveled, 13,250 miles were in ballast. The Alaska and Bering sea average movement per ton was the highest of all, being 5.52 miles, and this was partly due to the fact that of the 544,751 miles traveled, 25,900 were in ballast, and partly to the other fact that while the cruises in the Bering sea are exceedingly long the freight is much smaller than that of vessels engaged in usual lines of commerce.

TABLE J.—SUMMARY SHOWING THE FREIGHT MOVED, DISTANCE COVERED, AND AVERAGE DISTANCE OF EACH TON OF FREIGHT MOVED IN THE FIVE DIVISIONS OF TRAFFIC MOVEMENT BY ALL OPERATING CRAFT.

TRAFFIC MOVEMENT.	Freight moved. (Tons.)	Distance covered. (Miles.)	Average movement per ton. (Miles.)
Total	8, 818, 363	12, 273, 515	1. 39
Internal	5, 634, 151	5, 733, 186	1. 02
Coastwise	2, 372, 825	3. 153, 432	1. 33
Foreign	707, 085	2, 811, 896	3. 98
Atlantic	5, 550	30, 250	5. 45
Bering sea	98, 752	544, 751	5. 52

EARNINGS AND EXPENSES.

In Table 11 the figures are given which show how the business of transportation by water paid during the year ended December 31, 1889, for all operating craft over 5 tons burden. These figures are furnished under the headings of gross earnings, expenses, and net earnings, and are given for the steamers and unrigged craft and for sailing vessels allotted to their customs districts. The figures in the first part of the table indicate that the gross earnings of the whole operating fleet amounted to $20,628,316.28, the expenses to $17,274,809.30, leaving the net earnings at $3,353,506.98. The largest figures of this total are for the district of San Francisco, the gross earnings of its operating fleet standing at $14,191,341.93, with expenses of $11,701,926.71 and net earnings at $2,489,415.22. The next largest account is that of the Willamette or Portland district, its fleet earning $3,439,199.57, paying out $3,088,220.32, and making as net earnings $350,979.25. The net earnings of the Puget sound or Port Townsend district fleet were much larger, the figures being $411,862.61, which is larger than the net earnings of the fleet registered in all the districts of Oregon, this sum being a profit on the gross earnings of $2,214,731.23, after paying out $1,802,868.62 for expenses. The other districts placed in the order of their importance as judged from the financial account stand as Oregon, Humboldt, Yaquina, Wilmington, southern district of Oregon, and San Diego.

Of the totals of the combined fleets the gross earnings of the operating steamers and unrigged craft amounted to $13,237,222.29, the expenses to $11,446,692.77, and the net earnings to $1,790,529.52. San Francisco maintains its importance in the returns of the steamers' accounts just as it did in the returns of the entire fleet, the gross earnings being $8,015,094.94, the expenses $6,872,414.76, and the net earnings $1,142,680.18. The Willamette district also retains its relative importance, the gross earnings being $3,383,404.26, the expenses $3,050,676.43, and the net earnings $332,727.83. Puget sound again comes third, the gross earnings of its steam and unrigged fleet being $1,241,116.20, the expenses $988,892.50, and its net earnings $252,223.70. The steamers of the Oregon or Astoria district and the southern Oregon or Coos bay district made a presentable showing of net earnings, these being $45,229.11 on gross earnings of $212,478.11 for Oregon and $14,093.97 on $56,499.33 for southern Oregon. The steamers of Wilmington and Humboldt or Eureka districts make a poor showing. Of $64,406.14 of gross earnings the expenses of running the Wilmington steamers amounted to $63,576.84, leaving net earnings of only $829.30; and while the gross earnings of the Humboldt steamers amounted to $102,488.21, the expenses amounted to $87,232.30, leaving net earnings of only $15,255.91. The steamers of the San Diego and Yaquina districts ran even less profitably, the account of San Diego showing gross earnings of $42,507.47, with expenses of $45,985.04, leaving a deficit of $3,477.57; and the account of Yaquina showing earnings amounting to $119,227.63, expenses to $128,260.54, leaving a deficit of $9,032.91.

In the financial account of the sailing vessels a steady rate of profit is maintained. The gross earnings were $7,391,093.99, the expenses $5,828,116.53, leaving net earnings of $1,562,977.46, or but very little less than the net earnings in the $13,237,222.29 gross earnings of the steamers. The figures of the different districts need not be quoted, except in the cases of Willamette and Puget sound. In the returns of the steamer fleet Willamette easily led, but in the figures of the sailing fleet the positions are reversed. The gross earnings of the Puget sound sailing vessels were $973,615.03, while those of Willamette were but $55,795.31, and the net earnings of Puget sound sailing vessels were $159,638.91, while those of the Willamette sailing vessels were but $18,251.42.

The classes or occupations for which the account of earnings and expenses has been made up are passenger and freight vessels, ferryboats, fishing vessels, harbor tugs, and pilot boats. Their financial account is given in detail in Tables 16 to 23, inclusive, entitled "General operations by classes". The earnings and expenses of the five classes will be found in the accompanying summary. The gross earnings and the expenses of pilot boats are equal, since the pilots do not report their professional earnings. The boats are used simply to carry the pilots to vessels and the earnings of the boats as such are the expenses of maintaining crew and equipment. The gain or loss is that of pilotage, not that of running the boats.

TABLE K.—SUMMARY SHOWING THE TOTAL EARNINGS AND EXPENSES OF THE OPERATING FLEET OF THE PACIFIC COAST.

CLASSES OF OCCUPATIONS.	Gross earnings.	Expenses.	Net earnings.
Total	$20, 628, 316. 28	$17, 274, 809. 30	$3, 353, 506. 98
Passenger and freight	18, 112, 955. 63	14, 898, 141. 32	3, 214, 814. 31
Ferryboats	994, 475. 95	964, 904. 32	29, 571. 63
Fishing vessels	719, 872. 25	697, 836. 45	22, 035. 80
Harbor tugs	765, 305. 72	678, 220. 48	87, 085. 24
Pilot boats	35, 706. 73	35, 706. 73	

In Table 12 the $14,898,141.32 of expenses which were reported for the 1,001 vessels engaged in traffic operations exclusive of ferryboats are reduced to the principal items making up the sum. These items are port charges, wages, provisions, current repairs, fuel (for the steamers), commissions, insurance, taxes, and office expenses, together with two entries for what other running and shore expenses may not have been included in the list of items just quoted. These items of expenses are distributed among the steamers and sailing vessels for each district of registration with totals for the states and coast. The expenses of the unrigged craft are included in the accounts of the steamers. By far the largest item of expenses was that of wages, the figures being $5,212,639.20, of which amount $2,924,205.19 were paid on board the steamers and $2,288,434.01 on board the sailing vessels. Of the total wages San Francisco paid $1,655,683.25 to steamer hands and $1,904,194.72 to the crews of the sailing vessels, while the Willamette or Portland shipowners paid out $694,578.16 to the officers and men of the combined fleet, Puget sound's wage list for the steamers and sailing vessels being $683,069.31.

The next largest item of expense was that of fuel, the cost of which amounted to $2,094,523.42. Provisions cost $1,507,183.73, of which $832,191.57 were expended on steamers, and $674,992.16 on sailing vessels; current repairs cost $1,098,232.29, the steamers' portion of that expense being $613,703.33 and the sailing vessels' part being $484,528.96. The cost of insuring the steamers was $384,795.87 and the sailing vessels $158,142.14. Port charges of the coast freighting fleet amounted to $292,085.09, commissions to $175,080.30, and taxes to $125,655.76.

EMPLOYÉS AND WAGES.

Table 13 treats in detail of the monthly wages of all classes of employés on vessels engaged in the transportation of passengers and freight on the Pacific coast in the year 1889, exclusive of ferryboats. Of these employés the steamer list (which contains the account of the crews of the unrigged craft) includes captains, first mates, second mates, third mates, boatswains, clerks, pursers, surgeons, first engineers, second engineers, third engineers, firemen, coal passers, wheelmen, pilots, lookouts, watchmen, cooks, bakers, cooks' assistants, pantrymen, butchers, seamen, deck hands, porters, oilers, water tenders, stewards, storekeepers, waiters, boys, chambermaids, stewardesses, and carpenters; while the sailing vessel list includes captains, first mates, second mates, clerks, wheelmen, pilots lookouts, watchmen, cooks, cooks' assistants, seamen, stewards, boys, and carpenters. The number of each class of employés for steamers and sailing vessels is given by districts for the coast and in a comprehensive total. From this latter have been worked out the accompanying summaries which show the aggregate and average monthly payments made to each class.

Table L.—SUMMARY SHOWING THE AGGREGATE AND AVERAGE MONTHLY WAGES PAID TO EACH GRADE OF EMPLOYÉS ON ALL VESSELS ENGAGED IN PASSENGER AND FREIGHT TRAFFIC ON THE PACIFIC COAST FOR ONE MONTH OF THE YEAR 1889, EXCLUSIVE OF FERRYBOATS.

EMPLOYÉS.	Number employed.	Aggregate wages for one month.	Average monthly wages.
Total	10,396	$521,502.86	$50.16
Captains	1,001	95,175.97	95.08
First mates	685	39,573.77	57.77
Second mates, third mates, and boatswains	432	20,756.16	48.05
Clerks and pursers	189	12,652.50	66.94
Surgeons	2	110.00	55.00
First engineers	353	35,798.54	101.41
Second and third engineers	251	18,650.00	74.30
Firemen and coal passers	657	29,847.26	45.43
Wheelmen and pilots	134	9,509.17	70.96
Lookouts	24	1,039.50	43.31
Watchmen	160	6,702.73	41.89
Cooks and bakers	726	35,339.45	48.68
Cooks' assistants, pantrymen, and butchers	393	10,952.28	27.87
Seamen	3,331	127,817.33	38.37
Deck hands and porters	939	38,344.25	40.84
Oilers and water tenders	172	8,053.37	46.82
Stewards and storekeepers	192	9,440.00	49.17
Waiters	455	11,612.58	25.52
Boys	163	3,858.00	23.67
Chambermaids and stewardesses	18	445.00	24.72
Carpenters	119	5,825.00	48.95

Table M.—SUMMARY SHOWING THE AGGREGATE AND AVERAGE MONTHLY WAGES PAID TO EACH GRADE OF EMPLOYÉS ON ALL STEAMERS ENGAGED IN PASSENGER AND FREIGHT TRAFFIC ON THE PACIFIC COAST FOR ONE MONTH OF THE YEAR 1889, EXCLUSIVE OF FERRYBOATS.

EMPLOYÉS.	Number employed.	Aggregate wages for one month.	Average monthly wages.
Total	5,825	$311,545.22	$53.48
Captains	354	41,271.46	116.59
First mates	286	18,783.87	65.68
Second mates, third mates, and boatswains	138	7,556.16	54.75
Clerks and pursers	188	12,552.50	66.77
Surgeons	2	110.00	55.00
First engineers	353	35,798.54	101.41
Second and third engineers	251	18,650.00	74.30
Firemen and coal passers	657	29,847.26	45.43
Wheelmen and pilots	128	9,204.17	71.91
Lookouts	19	844.50	44.45
Watchmen	153	6,407.73	41.88
Cooks and bakers	296	14,544.45	49.14
Cooks' assistants, pantrymen, and butchers	267	8,372.28	31.36
Seamen	800	35,090.10	43.86
Deck hands and porters	939	38,344.25	40.84
Oilers and water tenders	172	8,053.37	46.82
Stewards and storekeepers	177	8,870.00	50.11
Waiters	455	11,612.58	25.52
Boys	140	3,517.00	25.12
Chambermaids and stewardesses	18	445.00	24.72
Carpenters	32	1,670.00	52.19

TABLE N.—SUMMARY SHOWING THE AGGREGATE AND AVERAGE MONTHLY WAGES PAID TO EACH GRADE OF EMPLOYÉS ON ALL SAILING VESSELS ENGAGED IN PASSENGER AND FREIGHT TRAFFIC ON THE PACIFIC COAST FOR ONE MONTH OF THE YEAR 1889.

EMPLOYÉS.	Number employed.	Aggregate wages for one month.	Average monthly wages.
Total	4,571	$209,957.64	$45.93
Captains	647	53,904.51	83.31
First mates	399	20,789.90	52.11
Second mates, third mates, and boatswains	294	13,200.00	44.90
Clerks	1	100.00	100.00
Wheelmen and pilots	6	305.00	50.83
Lookouts	5	195.00	39.00
Watchmen	7	295.00	42.14
Cooks	430	20,795.00	48.36
Cooks' assistants	126	2,580.00	20.48
Seamen	2,531	92,727.23	36.64
Stewards	15	570.00	38.00
Boys	23	341.00	14.83
Carpenters	87	4,155.00	47.76

AVERAGES AND AGGREGATE WAGES.

So far the subject of employés, their number and wages, has only been considered in connection with the freight and passenger carrying vessels, exclusive of ferryboats, and for an illustrative month. In the eight tables numbered from 16 to 23, inclusive, treating of the general operations by classes, not only are the details of equipment and traffic operations given of all the different classes of vessels, but there is also given for each class such details of wages and employés as the number of common seamen employed in each district and state, the average wages paid to common seamen, the number of men of all grades making up the ordinary crews, the total number of men employed, and the total amount of money paid out as wages to officers and crews during the year. Gathering the facts presented in these tables, they are shown in the following summary:

TABLE O.—SUMMARY SHOWING TOTAL AND AVERAGE WAGES PAID ORDINARY CREWS AND TOTAL NUMBER OF MEN EMPLOYED ON ALL OPERATED VESSELS, OF EVERY CLASS OF OCCUPATION, ON THE PACIFIC COAST DURING THE YEAR 1889.

CLASSES OF OCCUPATIONS.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed at different times.	Total wages paid during year.
Total	4,302	$38.36	12,181	33,656	$6,127,450.69
Passenger and freight	3,331	38.37	10,396	30,332	5,212,639.20
Ferryboats	126	59.00	478	1,150	395,157.00
Fishing vessels	790	34.97	866	1,485	247,028.56
Harbor tugs	25	42.59	374	573	247,630.49
Pilot boats	14	33.77	31	71	16,310.00
Yachts and pleasure boats	16	36.68	36	45	8,685.44

In connection with the preceding summary two or three items are to be noted. In the first place, the "number of men employed" does not stand for the number of men who received a year's employment during 1889, but indicates the number of men to whom whole or partial employment was given during that year; that is, supposing the ordinary crew of a vessel was 6 men, and 14 men were shipped during the year, then the 14 men are set down as having found employment. In the column entitled "ordinary crews" there is given the total number of men required to work and officer the 1,230 operating vessels (exclusive of unrigged, as their crews are included in those of the operating vessels) reported on for the different ports. In the next place, the entries in the column of "wages paid" represent the total wages paid during the year at the average rate of wages to the officers and men making up the ordinary crews for such time as they were employed; that is, supposing the vessel's ordinary crew included 16 seamen and the wages paid by the owner of that vessel was $20 a month per man and the men were employed 10 months, then the amount set down would be $3,200.

In a great number of cases the captain or owner made the return that the vessels were run on shares, and that consequently he could not give any account of wages paid. In such cases it was insisted that the captain or owner should reckon as "wages paid" the amount which he would have had to pay to captains or men had such been employed, and then to enter that amount up for the number of days during which the vessel was in service. The same plan was adopted in the case of the numerous San Francisco bay schooners, where the captain and deck hands were paid out of what is called the "stock"; that is, the gross earnings of the vessel, or where the fashion of the "lay" is followed, or when the captain was paid a percentage of earnings; so that by thus obtaining a uniform style of report the $6,127,450.69 can be accepted as the amount actually paid out or which would have been paid to the persons making up the crew list of the 1,230 vessels reported on, figuring on the basis of the average rate of wages paid in Pacific coast ports.

NATIONALITY OF EMPLOYÉS.

The endeavor to secure a report on the nationality of the employés was only partially successful. No data are at hand from which to say whether the number of native born citizens of the United States who follow the sea is increasing or not on the Pacific coast, but the opinion of a few intelligent shipowners who were approached on the subject was that such a tendency did exist. The returns themselves show, at any rate, that with very few exceptions the masters of American vessels of large burden were American born. The great bulk of the "ordinary seamen" hailed from the Baltic districts and the north of Europe, which to the ship's master was known as Scandinavia, and whether a man was a Finn or a Hollander he was classed as a Scandinavian. Of those returned as coming from Great Britain and Ireland the majority were Welsh or Irish. The number of Chinese sailors was never large on the Pacific coast, and the 286 reported were either crews of foreign going steamers or cooks of big vessels. The term "other countries" is an all-embracing one, as may be gathered from the returns of two sample vessels. One, a lumber vessel, carried a crew of 18, including men and officers, although 78 were taken into partial employment during the year, and of this latter number Scotland furnished 1, the United States 19, Germany 1, England 1, Russia and Finland 16, Italy 2, China 6, Portugal 2, Norway 15, Sweden 15; while the second, a whaler, had a crew consisting of Americans, English, Greeks, Mexicans, Scandinavians, Indians, and Portuguese. Such information as could be secured on this subject is set down in the following summary:

TABLE **P.**—SUMMARY SHOWING THE PRINCIPAL NATIONALITIES OF OFFICERS AND MEN EMPLOYED ON OPERATING VESSELS REGISTERED IN PACIFIC COAST PORTS IN THE YEAR 1889.

DISTRICTS.	STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT.					
	Total number of men employed at different times.	United States.	Scandinavia.	Great Britain and Ireland.	China.	Other countries.
Total for coast	33,656	5,074	12,309	1,163	286	14,824
California	25,139	2,199	10,167	575	60	12,138
San Diego	106	60	28	1		17
Wilmington	167	63	39	27	2	36
San Francisco	24,545	2,029	10,019	524	58	11,915
Humboldt	321	47	81	23		170
Oregon	4,497	1,181	631	288	144	2,253
Southern Oregon	76	50	15	4	1	6
Yaquina	318	68	22	2	12	214
Oregon	604	277	54	16	6	251
Willamette	3,499	786	540	266	125	1,782
Washington, Puget sound	4,020	1,694	1,511	300	82	433

FUEL ACCOUNT.

An itemization has been made of the fuel account in Table 15, wherein are set down the amounts of coal and wood burned by the passenger and freight steamers, ferryboats, harbor tugs, and steam yachts during the operating year of 1889, together with the cost of the fuel. From this table it will be seen that the total cost of the fuel was $2,467,882.17. Of this sum the coal, which amounted to 371,977 tons, cost $2,117,032.65; while the wood, of which 163,669 cords were burned, cost $350,849.52, making the average price of the coal $5.69 per ton and the average price of wood $2.14 per cord. The summary on the following page gives the quantities of fuel consumed.

TABLE Q.—SUMMARY SHOWING THE QUANTITIES OF COAL AND WOOD BURNED BY PASSENGER AND FREIGHT STEAMERS, FERRYBOATS, HARBOR TUGS, AND STEAM YACHTS REGISTERED IN PACIFIC COAST PORTS FOR THE YEAR 1889.

DISTRICTS.	Coal. (Tons.)	Wood. (Cords.)
Total for coast	371,977	163,669
California	291,980	14,299
San Diego	1,842	
Wilmington	1,878	2
San Francisco	286,625	10,955
Humboldt	1,635	3,342
Oregon	54,743	95,643
Southern Oregon	3	3,496
Yaquina	2,945	2,559
Oregon	79	14,896
Willamette	51,716	74,692
Washington, Puget sound	25,254	53,727

GENERAL OPERATIONS.

In the eight tables, 16 to 23, inclusive, the important figures given in the various presentations of equipment, traffic, and financial data are segregated and given for each class of vessel according to its occupation. These tables are drawn out as nearly as possible on a uniform plan. One or two entries, however, need explanation, even at the risk of some slight repetition.

Table 16, for instance, classes as freighters those vessels actually carrying freight, all towboats engaged in moving freight, and those craft owned by fishing concerns but used as freighters. The freight movement given under the head of unrigged in this table is that which was not reported on by any towing steamer, and is therefore entered up as a separate account.

The figures in Table 17, giving the freight and passenger traffic and the earnings and expenses of railroad ferryboats, were needed to make the report on the ferry industry a complete one.

Those vessels which were engaged in fishing, sealing, whaling, etc., but which only incidentally carried freight and whose earnings were from the sale of the catch, are the "fishing vessels", which are reported on separately in Table 18.

The harbor tugs reported on in Table 19 are those employed in the towing of vessels already reported on, and in all general harbor operations (except that of regularly towing barges and lumber), while the floating channel property referred to consists of dredgers, pile drivers, water boats, etc.

The yachts and pleasure boats given in Table 21 are, it should be remembered, those of over 5 tons burden, this minimum of tonnage excluding the small pleasure boats.

The number of vessels engaged in all of the occupations shown in Tables 16, 17, 18, 19, 20, and 21 does not, however, make up the total of those given in Table 1, "Equipment of fleets, all craft", although their income, expenditures, and traffic operations would make up the total of the returns given in Table 7, "Traffic in general", and Table 11, "Financial account in general". The difference in the equipment account is made up in Table 22, entitled "No traffic report". In this are given the number, tonnage, and value of all such craft as had no traffic report either because of being out of commission, from having been lost prior to or during 1889, because of being sold to foreign owners or being untraceable.

COMPARATIVE STATISTICS.

In considering the comparative statistics embraced in Tables 24 to 37, inclusive, it must be remembered that the figures are derived from two sources, according to the material at hand. The first five tables are made up from the data given in the transportation volume of the Tenth Census compared with such totals drawn from the report of the present census as could be comparatively presented. It may be repeated that the only branch of transportation on the Pacific coast fully reported on at the Tenth Census was that conducted by steamers, so that the tabulation of comparative census figures is necessarily restricted to the operations of this class of craft, though the number and tonnage of sailing vessels and unrigged craft were given.

The following summary was in the report on transportation for the Tenth Census:

PACIFIC COAST IN 1880.

There were 319 steamers owned on the Pacific coast in 1880. Of these steamers 178 were owned in California, 89 in Oregon, and 52 in Washington territory.

They measured 97,004.88 tons, and were valued at $6,477,500, averaging 304.09 tons apiece, with an average value of $20,306.

The capital invested in these steamers, exclusive of dock property, was $8,854,490, and they gave employment to 3,008 men.

Gross earnings here were $6,362,770, or 71.9 per cent on the capital invested. Excepting in the case of a few of the large and well established lines, money was lost in the competition with the railroads, and there has been a gradual withdrawal of lines for several years past in consequence of this competition. The amount paid for services here was $1,953,451, or an average of $649.41 per annum for each employé. The passenger movement was 6,604,712, of which 300,752 were regular passengers and 6,303,960 were ferry passengers. The freight movement was reported at 2,087,293 tons, of which 249,583 tons were carried by ocean steamers, 838,019 tons by inland passenger steamers, 240,298 tons by freight steamers, and 759,393 tons by ferry steamers.

The fuel consumed in this group, amounting to 146,407 tons of coal and 103,446 cords of wood, shows an average of 1.50 tons of coal to the ton of measurement and 1.06 cords of wood.

Table 24 shows that in 1880 the Pacific coast fleet of steamers and unrigged craft numbered 534, with a tonnage of 125,090 and a value of $6,620,980, and that in 1889 the coast fleet of steamers and unrigged craft numbered 1,020, had a tonnage of 233,859 and a value of $16,351,800, an increase of 486 in number, 108,769 tons in tonnage, and $9,730,820 in value. This increase, it will be seen, is quite as much in the steamers as it is in the unrigged craft, and is about equally distributed between the fleets of California, Oregon, and Washington. The classification of the steamer fleets for both years has been made in Table 25 by passenger and freight carrying boats, ferryboats, towing and harbor tugs, and miscellaneous craft, and from this classification it is seen that the passenger and freight carrying craft in 1880 numbered 224, with a tonnage of 70,392 and a value of $4,414,900, while in 1889 the freighters numbered 354, had a tonnage of 129,490 and a value of $12,660,755, an increase of 130 in number, 59,098 in tonnage, and $8,245,855 in value.

EARNINGS AND WAGES, 1880 AND 1889.

The financial account of the steamers in 1880 was limited to the gross earnings and wages, and only these are given for both years in Table 26, and because the returns in 1880 were made only for states, while in 1889 they were made for districts, the comparison by localities is limited to states. All that can be shown, therefore, is that in 1880 the gross earnings on all the reporting steamers of the Pacific coast amounted to $6,362,770, while in 1889 they had risen to $13,237,222, a gross increase of $6,874,452 and an average annual increase of $763,828. The amount paid out in wages on steamers in the years under consideration is given in Table 26, because it is the only item of expense that can be compared, but a better consideration of it can be had from a study of Table 27. Here again, as in all other tables dealing with employés, the entry entitled "Total number of men making up the ordinary crews", is to be accepted as indicating the total number of men required to work all the reporting steamers and not the total number of men employed during the year. The number of men making up the complement of the steamer crews in 1880 was 3,008, while in 1889 the number was 6,818. To these there was paid out as wages during 1880 $1,953,451, while in 1889 the total wages paid amounted to $3,682,062. The average annual wages per man in 1880 was $649.42 and $540.05 in 1889, an average annual decrease of $109.37. It may be added that the average annual decrease for the states making up this average annual decrease for the coast was $22.35 in California, $275.85 in Oregon, and $240.94 in Washington.

FREIGHT AND PASSENGER TRAFFIC, 1880 AND 1889.

The same remarkable increase that was seen in the number, tonnage, and value of the steamers of 1889 over those of 1880 is shown in the increase of freight and passenger traffic. In 1880 the freight moved on the steamers was 2,087,293 tons, while in 1889 it was 8,173,504 tons, an increase of 6,086,211 tons, or 292 per cent. It will be observed that in the freight movement of California the railroad ferry freight is also included in the 1889 figures, and this is done because the ferry figures were also included in the 1880 report. The passenger traffic in 1880 amounted to 6,604,712, while in 1889 there were 15,672,093 passengers.

FLEETS, 1880 AND 1889.

The comparative statistics found in Table 29 and the ten following tables have been gathered from the reports of the Bureau of Navigation. Table 29 gives the number and tonnage of the steamers, sailing vessels, and barges registered in each district of the Pacific coast for each year of the decade, the coast total for each year being given in a tabulated recapitulation. In this recapitulation it is shown that there has been a gradual but steady increase in the registered fleet of the coast during the ten years in question. In 1880, for instance, the registered sailing vessels numbered 752; in 1883 there were 812; in 1886 there were 829, and in 1889 there were 841. The tonnage of the registered sailing vessels in 1880 was 148,400; in 1882 it was 167,351; in 1887 it was 189,702, and in 1889 it was 248,430. In 1880 the registered steamers numbered 305 with a tonnage of 110,415; in 1884 the registered steamers numbered 384 with a tonnage of 146,562; in 1887, 426 steamers were registered with a tonnage of 160,140; and in 1889, 517 steamers were registered with a tonnage of 180,496. On the other hand, the registered barge fleet shows a very decided drop in 1883, the number in 1882 being 68 with a tonnage of 12,980, while in 1883 it fell to 8 with a tonnage of 5,973, and there continued until after 1888, the reason for this diminution being that after 1882 the registration of unrigged craft was no longer compulsory. This fact, too, explains the discrepancy between the total for the 1889 fleet as reported by the Commissioner of Navigation and that reported by the census. The Commissioner of Navigation gives 9 barges with a tonnage of 6,078 as the registered fleet of unrigged, while the census gives 489 unrigged with a tonnage of 63,356 as the registered and unregistered fleet of unrigged. Leaving out the unrigged, the Commissioner of Navigation reports on 1,358 registered steamers and sailing vessels, while the census reports on 1,353 vessels.

Tables 30 to 37, inclusive, show the average tonnage of all steamers, sailing vessels, and unrigged craft registered in each district for the decade, the annual average number of vessels registered, and the fluctuations from that annual average for each district and for each year. The following summary presents the average tonnage per vessel of each year's registered fleet at a glance:

TABLE **R.**—SUMMARY SHOWING THE NUMBER, TONNAGE, AND AVERAGE TONNAGE OF ALL VESSELS REGISTERED IN THE PACIFIC COAST DISTRICTS FOR THE TEN YEARS, 1880–1889.

YEARS.	Number.	Tonnage.	Average tonnage.
1880	1,124	270,801.75	240.93
1881	1,128	284,425.60	252.15
1882	1,166	300,766.83	257.95
1883	1,169	326,944.94	279.68
1884	1,202	334,188.81	278.03
1885	1,250	360,110.56	288.09
1886	1,253	347,059.73	276.98
1887	1,217	355,814.58	292.37
1888	1,293	399,173.18	308.72
1889	1,367	435,004.14	318.22

The gradual increase in the average tonnage of the registered fleet is shown in the preceding tables, and the two summaries following show whether this increase is on the part of steamers or of the sailing vessels:

TABLE **S.**—SUMMARY SHOWING THE NUMBER, TONNAGE, AND AVERAGE TONNAGE OF ALL STEAMERS REGISTERED IN THE PACIFIC COAST DISTRICTS FOR THE TEN YEARS, 1880–1889.

YEARS.	Number.	Tonnage.	Average tonnage.
1880	305	110,414.61	362.02
1881	310	112,434.54	362.69
1882	326	120,434.94	369.43
1883	349	134,435.75	385.20
1884	384	146,561.82	381.67
1885	402	153,808.04	382.61
1886	416	156,320.30	375.77
1887	426	160,139.75	375.91
1888	459	168,268.58	366.60
1889	517	180,496.04	349.12

TABLE T.—SUMMARY SHOWING THE NUMBER, TONNAGE, AND AVERAGE TONNAGE OF ALL SAILING VESSELS REGISTERED IN THE PACIFIC COAST DISTRICTS FOR THE TEN YEARS, 1880–1889.

YEARS.	Number.	Tonnage.	Average tonnage.
1880	752	148, 400. 41	197. 34
1881	748	158, 940. 98	212. 49
1882	772	167, 351. 44	216. 78
1883	812	186, 536. 21	229. 72
1884	818	187, 626. 99	229. 37
1885	840	200, 329. 54	238. 49
1886	829	184, 766. 45	222. 88
1887	783	189, 701. 85	242. 28
1888	826	224, 931. 62	272. 31
1889	841	248, 429. 78	295. 40

From these two summaries it is demonstrated that the increase of tonnage has been on the part of the sailing vessels. In 1880 the average tonnage of the registered fleet of steamers was 362.02, and while in 1883 it increased to 385.20, it decreased continuously from that time until in 1889 it was 349.12. On the other hand, while the average annual tonnage of the Pacific coast registered sailing vessels in 1880 was 197.34, it rose steadily from that to an average of 295.40 in 1889.

The numbers given in Tables S and T will not uniformly balance with the numbers for all vessels in Table R, since a separate statement for unrigged craft was not given for each year.

SHIPBUILDING RECORDS.

In Table 38 are set down the records of shipbuilding in the customs districts of the Pacific coast during the ten years 1880–1889. The following summary shows the number, tonnage, and average tonnage of the steamers and sailing vessels built during each year of the decade:

TABLE U.—SUMMARY SHOWING THE NUMBER, TONNAGE, AND AVERAGE TONNAGE OF THE STEAMERS AND SAILING VESSELS BUILT ON THE PACIFIC COAST IN THE TEN YEARS 1880–1889.

YEARS.	STEAMERS.			SAILING VESSELS.		
	Number.	Tonnage.	Average tonnage.	Number.	Tonnage.	Average tonnage.
Total for 10 years	369	68, 351. 18	185. 23	390	58, 353. 33	149. 62
1880	25	7, 642. 61	305. 70	15	937. 44	62. 50
1881	21	3, 010. 41	143. 35	35	7, 382. 15	210. 92
1882	28	6, 727. 35	240. 26	46	9, 043. 17	196. 59
1883	34	4, 019. 17	118. 21	56	11, 547. 84	206. 21
1884	42	5, 865. 99	139. 67	42	4, 746. 37	113. 01
1885	38	8, 867. 37	233. 35	35	2, 133. 91	60. 97
1886	23	3, 023. 31	131. 45	35	2, 890. 61	82. 59
1887	32	3, 750. 45	117. 20	39	5, 355. 79	137. 33
1888	55	12, 710. 22	231. 09	48	9, 140. 87	190. 43
1889	71	12, 734. 30	179. 36	39	5, 175. 18	132. 70

Table 39, which is the last of the tables of comparative statistics, deals only with the steamers built in each of the ten years, and considers them under the various methods of propulsion; that is, whether propeller, side-wheel, or stern-wheel. From this table it is seen that of 369 steamers with a tonnage of 68,351.18, 241 were propellers with a tonnage of 31,728.75, 37 were side-wheelers with a tonnage of 16,133.22, and 91 were stern-wheelers with a tonnage of 20,489.21. The records of annual construction of these three classes of steamers are plainly exhibited in the summary on the following page.

TABLE **V.**—SUMMARY SHOWING THE NUMBER AND TONNAGE OF PROPELLERS AND SIDE-WHEEL AND STERN-WHEEL STEAMERS BUILT ON THE PACIFIC COAST DURING THE TEN YEARS 1880–1889.

YEARS.	METHODS OF PROPULSION.					
	Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total for 10 years	241	31, 728. 75	37	16, 133. 22	91	20, 489. 21
1880	10	402. 48	9	5, 804. 35	6	1, 435. 78
1881	10	887. 12	4	325. 06	7	1, 798. 23
1882	15	3, 915. 90	3	253. 10	10	2, 558. 35
1883	27	3, 097. 03	....	....	7	922. 14
1884	24	1, 428. 00	6	2, 583. 37	12	1, 854. 62
1885	22	3, 219. 04	5	2, 998. 51	11	2, 649. 82
1886	13	1, 145. 71	....	....	10	1, 877. 60
1887	26	2, 720. 48	2	347. 62	4	682. 35
1888	43	7, 749. 66	3	2, 427. 60	9	2, 532. 96
1889	51	7, 163. 33	5	1, 393. 61	15	4, 177. 36

CONGRESSIONAL APPROPRIATIONS.

In the last of the tables (Table 40) entitled "Congressional appropriations", it will be seen that the earliest appropriation made by the government for the improvement of the rivers and harbors of the Pacific coast was in 1852, when $111,000 were set aside for the survey and improvement of San Diego river and harbor. Since that time nearly a hundred localities have been improved under congressional aid, the sums appropriated up to 1890 amounting to $9,964,800. Of this amount $2,315,000 were appropriated up to and including 1879, $5,527,200 were included in the decade marked by 1880–1889, the remaining $2,122,600 having been appropriated by the act of September 19, 1890.

Of the total amount, $111,500 were appropriated for Washington, of which amount $78,500 were appropriated between 1880 and 1889 and the remaining $33,000 in 1890.

The appropriations for Oregon amounted to $5,765,050, of which amount $1,107,000 were appropriated up to and including 1879; $3,164,950 in the ten years 1880–1889, and $1,493,100 by the act of September 19, 1890.

The appropriations for California amounted to $4,038,250, of which amount $1,158,000 were appropriated up to and including 1879; $2,283,750 were appropriated from 1880 to 1889, inclusive, and $596,500 by the act of September 19, 1890.

Between the sum of these amounts, however, and the $9,964,800 given as the total appropriations for the Pacific coast there is a difference of $50,000, that sum being a general appropriation for which there was no indication of special locality, but which was made for such comprehensive purposes as general expenses and surveys.

Charged to the states the total appropriations are set down in the following summary:

TABLE **W.**—SUMMARY SHOWING THE AMOUNTS APPROPRIATED BY CONGRESS FOR THE SURVEY, IMPROVEMENT, AND MAINTENANCE OF THE HARBORS AND RIVERS OF THE PACIFIC COAST, GIVEN BY PERIODS AND ALLOTTED TO THE RESPECTIVE STATES FOR WHICH THE APPROPRIATIONS WERE MADE.

STATES.	Date of earliest appropriations.	Total appropriations up to date.	Appropriations up to and including 1879.	Appropriations from 1880–1889, inclusive.	Appropriations by act of Congress September 19, 1890.
Total	....	$9, 964, 800	$2, 315, 000	$5, 527, 200	$2, 122, 600
Washington	1880	111, 500	....	78, 500	33, 000
Oregon	1866	5, 765, 050	1, 107, 000	3, 164, 950	1, 493, 100
California	1852	4, 038, 250	1, 158, 000	2, 283, 750	596, 500
General expenses all states	1866	50, 000	50, 000	....	....

LANDINGS AND DISTANCES.

In accordance with the plan pursued when treating of the other branches of water transportation, this text may be brought to a close by giving a list of the principal trading points on the Pacific coast, with the distances from the principal ports.

DISTANCES BETWEEN OLYMPIA, WASHINGTON, AND OTHER POINTS ON THE PACIFIC COAST OF THE UNITED STATES, GOING SOUTH TO SAN DIEGO, CALIFORNIA.

	MILES.
Tacoma, Washington	40
Seattle, Washington	56
Skokomish, Washington	134
Freeport, Washington	54
Dwamish, Washington	60
Port Madison, Washington	60
Snohomish, Washington	96
Port Townsend, Washington	94
Utsaladdy, Washington	105
Stillaguamish, Washington	110
Laconner, Washington	115
Fidalgo, Washington	130
Mount Vernon, Washington	125
Whatcom, Washington	145
Friday harbor, Washington	130
New Dungeness, Washington	120
Port Angeles, Washington	135
Pysht, Washington	170
Neah bay, Washington	195
Cape Flattery, Washington	209
Quinault, Washington	276
Port Grenville, Washington	278
Humptulips, Washington	313
Grays harbor, Washington	308
Hoquiam, Washington	317
Montesano, Washington	335
Chehalis, Washington	303
Cosmopolis, Washington	324
Bay city, Washington	310
Petersons point, Washington	308
Willapa, Washington	340
Bay Center, Washington	335
Oysterville, Washington	340
Ilwaco, Washington	351
Cape Disappointment, Washington	346
Knappton, Washington	360
Cathlamet, Washington	383
Kalama, Washington	416
Vancouver, Washington	452
Cascades, Washington	484
Salem, Oregon	516
Oregon city, Oregon	464
Portland, Oregon	456
St. Helen, Oregon	428
Clifton, Oregon	380
Knappa, Oregon	366
Astoria, Oregon	360
Skipanon, Oregon	356
Port Klatsop, Oregon	357
Nehalem bay, Oregon	384
Tillamook head, Oregon	367
Netarts bay, Oregon	400
Cape Lookout, Oregon	405
Yaquina, Oregon	454
Oysterville, Oregon	454
Florence, Oregon	492
Empire city, Oregon	535
Coos city, Oregon	546
Cape Blanco, Oregon	562
Port Orford, Oregon	573
Ellensburg, Oregon	594
Chetco, Oregon	616
Crescent, California	637
Arcata, California	713
Eureka, California	708
Cape Mendocino, California	724
Shelter Cove, California	756
Westport, California	783
Mendocino, California	805
Navarro, California	816
Point Arena, California	832
Tomales, California	897
San Francisco, California	945
Mare island, California	967
Oakland, California	950
Santa Cruz, California	999
Castroville, California	1,010
Monterey, California	1,010
Point Sur, California	1,031
San Simeon, California	1,096
Cayucos, California	1,116
Port Harford, California	1,129
Point Sal, California	1,145
Santa Barbara, California	1,223
San Buenaventura, California	1,253
Hueneme, California	1,258
Santa Monica, California	1,302
Wilmington, California	1,323
San Pedro, California	1,320
San Juan Capistrano, California	1,356
Delmar, California	1,393
San Diego, California	1,420

DISTANCES BETWEEN SAN FRANCISCO, CALIFORNIA, AND OTHER POINTS ON THE PACIFIC COAST OF THE UNITED STATES, GOING SOUTH TO SAN DIEGO, CALIFORNIA.

	MILES.
Mare island, California	23
Oakland, California	5
Santa Cruz, California	80
Castroville, California	97
Monterey, California	97
Point Sur, California	119
San Simeon, California	184
Cayucos, California	204
Port Harford, California	216
Point Sal, California	232
Santa Barbara, California	310
San Buenaventura, California	340
Hueneme, California	345
Santa Monica, California	389
Wilmington, California	410
San Pedro, California	407
San Juan Capistrano, California	443
Delmar, California	481
San Diego, California	508

DISTANCES BETWEEN SAN FRANCISCO, CALIFORNIA, AND OTHER POINTS ON THE PACIFIC COAST OF THE UNITED STATES, GOING NORTH TO OLYMPIA, WASHINGTON.

	MILES.
Drake's bay, California	25
Tomales, California	54
Point Arena, California	113
Navarro, California	130
Mendocino, California	140
Westport, California	162
Shelter Cove, California	189
Cape Mendocino, California	221
Eureka or Humboldt bay, California	248
Arcata, California	254
Trinidad bay, California	264
Crescent, California	308
Chetco, Oregon	329
Ellensburg, Oregon	351
Port Orford, Oregon	373
Cape Blanco, Oregon	383
Coos city, Oregon	427
Empire city, Oregon	416
Florence, Oregon	464
Oysterville, Oregon	508
Yaquina, Oregon	508
Cape Lookout, Oregon	540
Netarts bay, Oregon	545
Tillamook head, Oregon	578
Nehalem bay, Oregon	562
Port Klatsop, Oregon	589
Skipanon, Oregon	609
Astoria, Oregon	613
Knappa, Oregon	619
Clifton, Oregon	633
St. Helen, Oregon	681
Portland, Oregon	709
Oregon city, Oregon	711
Salem, Oregon	769
Cascades, Washington	737
Vancouver, Washington	705
Kalama, Washington	669
Cathlamet, Washington	636
Knappton, Washington	613
Cape Disappointment, Washington	599
Ilwaco, Washington	605
Oysterville, Washington	637
Bay Center, Washington	632
Willapa, Washington	637
Petersons point, Washington	643
Bay city, Washington	645
Cosmopolis, Washington	659
Chehalis, Washington	637
Montesano, Washington	670
Hoquiam, Washington	651
Grays harbor, Washington	643
Humptulips, Washington	648
Port Grenville, Washington	667
Quinault, Washington	670
Cape Flattery, Washington	745
Neah bay, Washington	750
Pysht, Washington	775
Port Angeles, Washington	810
New Dungeness, Washington	825
Friday harbor, Washington	845
Whatcom, Washington	870
Mount Vernon, Washington	865
Fidalgo, Washington	855
Laconner, Washington	855
Stillaguamish, Washington	860
Utsaladdy, Washington	857
Port Townsend, Washington	845
Snohomish, Washington	895
Port Madison, Washington	880
Dwamish, Washington	895
Freeport, Washington	888
Skokomish, Washington	905
Seattle, Washington	890
Tacoma, Washington	915
Olympia, Washington	945

DISTANCES BETWEEN PORTLAND, OREGON, AND OTHER POINTS ON THE PACIFIC COAST OF THE UNITED STATES, GOING NORTH TO OLYMPIA, WASHINGTON.

	MILES.
Oregon city, Oregon	12
Salem, Orègon	60
Cascades, Washington	52
Vancouver, Washington	18
Kalama, Washington	40
Cathlamet, Washington	73
Knappton, Washington	96
Cape Disappointment, Washington	110
Ilwaco, Washington	105
Oysterville, Washington	148
Bay Center, Washington	143
Willapa, Washington	148
Petersons point, Washington	154
Bay city, Washington	156
Cosmopolis, Washington	170
Chehalis, Washington	148
Montesano, Washington	181
Hoquiam, Washington	162
Grays harbor, Washington	154
Humptulips, Washington	159
Port Grenville, Washington	178
Quinault, Washington	181
Cape Flattery, Washington	256
Neah bay, Washington	261
Pysht, Washington	286
Port Angeles, Washington	321
New Dungeness, Washington	336
Friday harbor, Washington	356
Whatcom, Washington	381
Mount Vernon, Washington	376
Fidalgo, Washington	366
Laconner, Washington	366
Stillaguamish, Washington	371
Utsaladdy, Washington	368
Port Townsend, Washington	356
Snohomish, Washington	406
Port Madison, Washington	391
Dwamish, Washington	406
Freeport, Washington	399
Skokomish, Washington	416
Seattle, Washington	401
Tacoma, Washington	426
Olympia, Washington	456

DISTANCES BETWEEN PORTLAND, OREGON, AND OTHER POINTS ON THE PACIFIC COAST OF THE UNITED STATES, GOING SOUTH TO SAN DIEGO, CALIFORNIA.

	MILES.
St. Helen, Oregon	28
Clifton, Oregon	76
Knappa, Oregon	82
Astoria, Oregon	96
Skipanon, Oregon	100
Port Klatsop, Oregon	120
Nehalem bay, Oregon	147
Tillamook head, Oregon	130
Netarts bay, Oregon	163
Cape Lookout, Oregon	168
Yaquina, Oregon	217
Oysterville, Oregon	217
Florence, Oregon	255
Empire city, Oregon	298
Coos city, Oregon	309
Cape Blanco, Oregon	325
Port Orford, Oregon	336
Ellensburg, Oregon	357
Chetco, Oregon	379
Crescent, California	400
Arcata, California	476
Eureka, California	471
Cape Mendocino, California	487
Shelter Cove, California	519
Westport, California	546
Mendocino, California	568
Navarro, California	579
Point Arena, California	595
Tomales, California	660
San Francisco, California	709
Mare island, California	731
Oakland, California	714
Santa Cruz, California	763
Castroville, California	774
Monterey, California	774
Point Sur, California	795
San Simeon, California	860
Cayucos, California	880
Port Harford, California	893
Point Sal, California	909
Santa Barbara, California	1,087
San Buenaventura, California	1,117
Hueneme, California	1,122
Santa Monica, California	1,166
Wilmington, California	1,187
San Pedro, California	1,184
San Juan Capistrano, California	1,220
Delmar, California	1,257
San Diego, California	1,284

EQUIPMENT, OCCUPATION, AND CONSTRUCTION.

TABLE 1.—EQUIPMENT OF FLEETS—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT OF OVER FIVE TONS BURDEN REGISTERED OR OWNED IN THE CUSTOMS DISTRICTS OF THE PACIFIC COAST CREDITED TO THE RESPECTIVE DISTRICTS, WITH TOTALS FOR EACH STATE.

CUSTOMS DISTRICTS.	TOTAL OF ALL CRAFT.			STEAMERS.			SAILING VESSELS.			UNRIGGED CRAFT.		
	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.
Total	1,842	441,939	$23,067,370	531	170,503	$15,526,455	822	208,080	$6,715.570	489	63,356	$825,345
California	1,177	304,886	16,148,080	251	106,667	9,792,905	697	162,946	5,753,975	229	35,273	601,200
San Diego	57	3,227	112,450	8	800	62,500	21	461	36,975	28	1,966	12,975
Wilmington	56	5,562	287,900	10	933	188,500	13	694	37,400	33	3,935	62,000
San Francisco	1,018	289,750	15,400,205	223	104,149	9,459,405	649	158,519	5,434,100	146	27,082	506,700
Humboldt	46	6,347	347,525	10	785	82,500	14	3,272	245,500	22	2,290	19,525
Oregon	366	68,963	4,733,365	165	50,628	4,492,200	43	2,776	97,065	158	15,559	144,100
Southern Oregon	109	3,887	99,290	15	771	70,600	1	90	8,000	93	3,026	20,690
Yaquina	16	2,321	287,600	13	2,281	287,400	......	......	......	3	40	200
Oregon	105	5,353	347,990	41	3,172	284,100	36	690	50,080	28	1,491	13,810
Willamette	136	57,402	3,998,485	96	44,404	3,850,100	6	1,996	38,985	34	11,002	109,400
Washington—Puget sound	299	68,090	2,185,925	115	13,208	1,241,350	82	42,358	864,530	102	12,524	80,045

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 2.—OCCUPATION AND VALUATION BY CLASSES—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT OF OVER FIVE TONS BURDEN, DIVIDED INTO CLASSES INDICATIVE OF OCCUPATION.

CUSTOMS DISTRICTS.	TOTAL EQUIPMENT.				STEAMERS.									
					Passenger and freight.				Ferry.				Fish.	
	Number.	Gross tonnage.	Valuation.	Value per gross ton.	Number.	Gross tonnage.	Valuation.	Value per gross ton.	Number.	Gross tonnage.	Valuation.	Value per gross ton.	Number.	Gross tonnage.
Total	1,842	441,939	$23,067,370	$52.20	354	129,491	$12,660,755	$97.77	38	24,630	$979,300	$39.76	24	4,343
California	1,177	304,886	16,148,080	52.96	147	73,833	7,657,705	103.72	20	22,551	816,000	36.18	14	3,960
San Diego	57	3,227	112,450	34.85	......	......	......	......	3	488	31,500	64.55	......	......
Wilmington	56	5,562	287,900	51.76	5	756	149,500	197.75	......	......	......	......	......	......
San Francisco	1,018	289,750	15,400,205	53.15	136	72,626	7,479,705	102.99	17	22,063	784,500	35.56	14	3,960
Humboldt	46	6,347	347,525	54.75	6	451	28,500	63.19	......	......	......	......	......	......
Oregon	366	68,963	4,733,365	68.64	114	45,016	4,027,200	89.46	16	1,783	118,300	66.35	9	370
Southern Oregon	109	3,887	99,290	25.54	12	651	48,300	74.19	1	20	1,200	60.00	......	......
Yaquina	16	2,321	287,600	123.91	7	1,077	125,000	116.06	1	16	900	56.25	1	106
Oregon	105	5,353	347,990	65.01	33	2,897	247,600	85.47	......	......	......	......	5	185
Willamette	136	57,402	3,998,485	69.66	62	40,391	3,606,300	89.28	14	1,747	116,200	66.51	3	79
Washington—Puget sound	299	68,090	2,185,925	32.10	93	10,642	975,850	91.70	2	296	45,000	152.03	1	13

CUSTOMS DISTRICTS.	STEAMERS—continued.													
	Fish—Continued.		Harbor tugs.				Yachts.				No traffic report.			
	Valuation.	Value per gross ton.	Number.	Gross tonnage.	Valuation.	Value per gross ton.	Number.	Gross tonnage.	Valuation.	Value per gross ton.	Number.	Gross tonnage.	Valuation.	Value per gross ton.
Total	$411,500	$94.75	70	6,109	$1,120,800	$183.47	3	63	$6,500	$103.17	42	5,867	$347,600	$59.25
California	341,000	86.11	52	4,279	833,500	194.79	1	18	2,500	138,89	17	2,026	142,200	70.19
San Diego	......	......	4	294	28,500	96.94	1	18	2,500	138.89	......	......	......	......
Wilmington	......	......	1	89	22,000	247.19	......	......	......	......	4	88	17,000	193.18
San Francisco	341,000	86.11	44	3,626	732,000	201.88	......	......	......	......	12	1,874	122,200	65.21
Humboldt	......	......	3	270	51,000	188.89	......	......	......	......	1	64	3,000	46.88
Oregon	69,000	186.49	9	484	108,300	223.76	......	......	......	......	17	2,975	169,400	56.94
Southern Oregon	......	......	2	100	21,100	211.00	......	......	......	......	......	......	......	......
Yaquina	25,000	235.85	2	126	44,500	353.17	......	......	......	......	2	956	92,000	96.23
Oregon	24,000	129.73	1	14	2,000	142.86	......	......	......	......	2	76	10,500	138.16
Willamette	20,000	253.16	4	244	40,700	166.80	......	......	......	......	13	1,943	66,900	34.43
Washington—Puget sound	1.500	115.38	9	1,346	179,000	132.99	2	45	4,000	88.89	8	866	36,000	41.57

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 2.—OCCUPATION AND VALUATION BY CLASSES—Continued.

CUSTOMS DISTRICTS.	SAILING VESSELS.											
	Freight.				Fish.				Pilot boats.			
	Number.	Gross tonnage.	Valuation.	Value per gross ton.	Number.	Gross tonnage.	Valuation.	Value per gross ton.	Number.	Gross tonnage.	Valuation.	Value per gross ton.
Total	647	194,478	$6,112,340	$31.43	60	6,372	$280,955	$44.09	9	418	$49,700	$118.90
California	577	150,825	5,236,900	34.72	42	5,897	242,525	41.13	6	258	30,000	116.28
San Diego	7	222	20,350	91.67	2	31	2,625	84.68	1	20	3,000	150.00
Wilmington	8	588	27,400	46.60					1	8	2,500	312.50
San Francisco	549	146,924	4,948,150	33.68	40	5,866	239,900	40.90	4	230	24,500	106.52
Humboldt	13	3,091	241,000	77.97								
Oregon	18	2,022	53,385	26.40	10	137	12,730	92.92	2	141	19,000	134.75
Southern Oregon	1	90	8,000	88.89								
Yaquina												
Oregon	14	220	10,350	47.05	10	137	12,730	92.92	2	141	19,000	134.75
Willamette	3	1,712	35,035	20.46								
Washington—Puget sound	52	41,631	822,055	19.75	8	338	25,700	76.04	1	19	700	36.84

CUSTOMS DISTRICTS.	SAILING VESSELS—continued.								UNRIGGED CRAFT.			
	Yachts.				No traffic report.				Freight.			
	Number.	Gross tonnage.	Valuation.	Value per gross ton.	Number.	Gross tonnage.	Valuation.	Value per gross ton.	Number.	Gross tonnage.	Valuation.	Value per gross ton.
Total	25	612	$69,300	$113.24	81	6,200	$203,275	$32.79	489	63,356	$825,345	$13.03
California	24	604	68,800	113.91	48	5,362	175,750	32.78	229	35,273	601,200	17.04
San Diego	7	101	8,500	84.16	4	87	2,500	28.74	28	1,966	12,975	6.60
Wilmington	4	98	7,500	76.53					33	3,935	62,000	15.76
San Francisco	13	405	52,800	130.37	43	5,094	168,750	33.13	146	27,082	506,700	18.71
Humboldt					1	181	4,500	24.86	22	2,290	19,525	8.53
Oregon					13	476	11,950	25.11	158	15,559	144,100	9.26
Southern Oregon									93	3,026	20,690	6.84
Yaquina									3	40	200	5.00
Oregon					10	192	8,000	41.67	28	1,491	13,810	9.26
Willamette					3	284	3,950	13.91	34	11,002	109,400	9.94
Washington—Puget sound	1	8	500	62.50	20	362	15,575	43.02	102	12,524	80,045	6.39

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 3.—OWNERSHIP BY CLASSES—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS AND SAILING VESSELS ALLOTTED RESPECTIVELY TO INDIVIDUAL, JOINT STOCK, AND CORPORATE OWNERSHIP, AND GROUPED FOR EACH CLASS OF OCCUPATION.

ALL STEAMERS AND SAILING VESSELS.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
			Individual.		Joint stock.		Corporate.		Individual.	Joint stock.	Corporate.
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
Total steam and sail	1,353	378,583	994	200,705	27	4,002	332	173,876	$9,001,115	$343,500	$12,897,410
Total steam	531	170,503	252	34,114	25	3,368	254	133,021	3,147,650	324,500	12,054,305
Total sail	822	208,080	742	166,591	2	634	78	40,855	5,853,465	19,000	843,105

STEAMERS.

PASSENGER AND FREIGHT.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total	354	129,491	179	27,140	18	2,825	157	99,526	2,417,850	246,500	9,996,405
California	147	73,833	57	13,552	12	2,510	78	57,771	1,302,500	193,000	6,162,205
Wilmington	5	756					5	756			149,500
San Francisco	136	72,626	53	13,288	12	2,510	71	56,828	1,285,000	193,000	6,001,705
Humboldt	6	451	4	264			2	187	17,500		11,000
Oregon	114	45,016	53	7,537	5	236	56	37,243	592,700	33,500	3,401,000
Southern Oregon	12	651	8	365	3	173	1	113	21,800	22,500	4,000
Yaquina	7	1,077	7	1,077					125,000		
Oregon	33	2,897	22	1,962	2	63	9	872	167,600	11,000	69,000
Willamette	62	40,391	16	4,133			46	36,258	278,300		3,328,000
Washington—Puget sound	93	10,642	69	6,051	1	79	23	4,512	522,650	20,000	433,200

FERRY.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total	38	24,630	7	202	2	216	29	24,212	28,600	13,000	937,700
California	20	22,551					20	22,551			816,000
San Diego	3	488					3	488			31,500
San Francisco	17	22,063					17	22,063			784,500
Oregon	16	1,783	6	179	2	216	8	1,388	23,600	13,000	81,700
Southern Oregon	1	20	1	20					1,200		
Yaquina	1	16	1	16					900		
Willamette	14	1,747	4	143	2	216	8	1,388	21,500	13,000	81,700
Washington—Puget sound	2	296	1	23			1	273	5,000		40,000

FISH.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total	24	4,343	5	626	2	149	17	3,568	45,000	24,000	342,500
California—San Francisco	14	3,960	1	516	1	91	12	3,353	20,000	18,000	303,000
Oregon	9	370	4	110	1	58	4	202	25,000	6,000	38,000
Yaquina	1	106					1	106			25,000
Oregon	5	185	1	31	1	58	3	96	5,000	6,000	13,000
Willamette	3	79	3	79					20,000		
Washington—Puget sound	1	13					1	13			1,500

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 3.—OWNERSHIP BY CLASSES—Continued.

STEAMERS—Continued.

HARBOR TUGS.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
			Individual.		Joint stock.		Corporate.		Individual.	Joint stock.	Corporate.
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
Total	70	6,109	33	2,189	3	178	34	3,742	$440,800	$41,000	$639,000
California	52	4,279	24	1,739	2	55	26	2,485	396,000	16,000	421,500
San Diego	4	294	2	29			2	265	8,500		20,000
Wilmington	1	89					1	89			22,000
San Francisco	44	3,626	19	1,440	2	55	23	2,131	336,500	16,000	379,500
Humboldt	3	270	3	270					51,000		
Oregon	9	484	6	174			3	310	30,300		78,000
Southern Oregon	2	100	2	100					21,100		
Yaquina	2	126	1	34			1	92	4,500		40,000
Oregon	1	14	1	14					2,000		
Willamette	4	244	2	26			2	218	2,700		38,000
Washington—Puget sound	9	1,346	3	276	1	123	5	947	14,500	25,000	139,500

YACHTS.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total	3	63	2	45			1	18	4,000		2,500
California—San Diego	1	18					1	18			2,500
Washington—Puget sound	2	45	2	45					4,000		

NO TRAFFIC REPORT.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total	42	5,867	26	3,912			16	1,955	211,400		136,200
California	17	2,026	8	1,401			9	625	43,500		98,700
Wilmington	4	88	2	48			2	40	7,500		9,500
San Francisco	12	1,874	5	1,289			7	585	33,000		89,200
Humboldt	1	64	1	64					3,000		
Oregon	17	2,975	13	2,058			4	917	138,400		31,000
Yaquina	2	956	1	883			1	73	80,000		12,000
Oregon	2	76	2	76					10,500		
Willamette	13	1,943	10	1,099			3	844	47,900		19,000
Washington—Puget sound	8	866	5	453			3	413	29,500		6,500

SAILING VESSELS.

FREIGHT.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total	647	194,478	587	157,048	1	594	59	36,836	5,369,835	15,000	727,505
California	577	150,825	544	141,871	1	594	32	8,360	4,951,900	15,000	270,000
San Diego	7	222	5	80			2	142	5,350		15,000
Wilmington	8	588	8	588					27,400		
San Francisco	549	146,924	518	138,112	1	594	30	8,218	4,678,150	15,000	255,000
Humboldt	13	3,091	13	3,091					241,000		
Oregon	18	2,022	18	2,022					53,385		
Southern Oregon	1	90	1	90					8,000		
Oregon	14	220	14	220					10,350		
Willamette	3	1,712	3	1,712					35,035		
Washington—Puget sound	52	41,631	25	13,155			27	28,476	364,550		457,505

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 3.—OWNERSHIP BY CLASSES—Continued.

SAILING VESSELS—Continued.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
			Individual.		Joint stock.		Corporate.		Individual.	Joint stock.	Corporate.
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
FISH.											
Total	60	6,372	46	4,084	1	40	13	2,248	$199,555	$4,000	$77,400
California	42	5,897	30	3,663			12	2,234	166,925		75,600
San Diego	2	31	2	31					2,625		
San Francisco	40	5,866	28	3,632			12	2,234	164,300		75,600
Oregon—Oregon	10	137	10	137					12,730		
Washington—Puget sound	8	338	6	284	1	40	1	14	19,900	4,000	1,800
PILOT BOATS.											
Total	9	418	8	354			1	64	39,700		10,000
California	6	258	6	258					30,000		
San Diego	1	20	1	20					3,000		
Wilmington	1	8	1	8					2,500		
San Francisco	4	230	4	230					24,500		
Oregon—Oregon	2	141	1	77			1	64	9,000		10,000
Washington—Puget sound	1	19	1	19					700		
YACHTS.											
Total	25	612	25	612					69,300		
California	24	604	24	604					68,800		
San Diego	7	101	7	101					8,500		
Wilmington	4	98	4	98					7,500		
San Francisco	13	405	13	405					52,800		
Washington—Puget sound	1	8	1	8					500		
NO TRAFFIC REPORT.											
Total	81	6,200	76	4,493			5	1,707	175,075		28,200
California	48	5,362	43	3,655			5	1,707	147,550		28,200
San Diego	4	87	4	87					2,500		
San Francisco	43	5,094	38	3,387			5	1,707	140,550		28,200
Humboldt	1	181	1	181					4,500		
Oregon	13	476	13	476					11,950		
Oregon	10	192	10	192					8,000		
Willamette	3	284	3	284					3,950		
Washington—Puget sound	20	362	20	362					15,575		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 4.—OWNERSHIP BY LOCALITIES—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS AND SAILING VESSELS ALLOTTED RESPECTIVELY TO INDIVIDUAL, JOINT STOCK, AND CORPORATE OWNERSHIP, AND GROUPED BY DISTRICTS.

ALL STEAMERS AND SAILING VESSELS.

CLASSES AND CUSTOMS DISTRICTS.	Total number.	Total tonnage.	NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
			Individual.		Joint stock.		Corporate.		Individual.	Joint stock.	Corporate.
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
Total steam and sail	1,353	378,583	994	200,705	27	4,002	332	173,876	$9,001,115	$343,500	$12,897,410
Total steam	531	170,503	252	34,114	25	3,368	254	133,021	3,147,650	324,500	12,054,305
Total sail	822	208,080	742	166,591	2	634	78	40,855	5,853,465	19,000	843,105
STEAMERS.											
Total for California	251	106,667	90	17,208	15	2,656	146	86,803	1,762,000	227,000	7,803,905
San Diego, California	8	800	2	29			6	771	8,500		54,000
Ferry	3	488					3	488			31,500
Harbor tugs	4	294	2	29			2	265	8,500		20,000
Yachts	1	18					1	18			2,500
Wilmington, California	10	933	2	48			8	885	7,500		181,000
Passenger and freight	5	756					5	756			149,500
Harbor tugs	1	89					1	89			22,000
No traffic report	4	88	2	48			2	40	7,500		9,500
San Francisco, California	223	104,149	78	16,533	15	2,656	130	84,960	1,674,500	227,000	7,557,905
Passenger and freight	136	72,626	53	13,288	12	2,510	71	56,828	1,285,000	193,000	6,001,705
Ferry	17	22,063					17	22,063			784,500
Fish	14	3,960	1	516	1	91	12	3,353	20,000	18,000	303,000
Harbor tugs	44	3,626	19	1,440	2	55	23	2,131	336,500	16,000	379,500
No traffic report	12	1,874	5	1,289			7	585	33,000		89,200
Humboldt, California	10	785	8	598			2	187	71,500		11,000
Passenger and freight	6	451	4	264			2	187	17,500		11,000
Harbor tugs	3	270	3	270					51,000		
No traffic report	1	64	1	64					3,000		
Total for Oregon	165	50,628	82	10,058	8	510	75	40,060	810,000	52,500	3,629,700
Southern Oregon, Oregon	15	771	11	485	3	173	1	113	44,100	22,500	4,000
Passenger and freight	12	651	8	365	3	173	1	113	21,800	22,500	4,000
Ferry	1	20	1	20					1,200		
Harbor tugs	2	100	2	100					21,100		
Yaquina, Oregon	13	2,281	10	2,010			3	271	210,400		77,000
Passenger and freight	7	1,077	7	1,077					125,000		
Ferry	1	16	1	16					900		
Fish	1	106					1	106			25,000
Harbor tugs	2	126	1	34			1	92	4,500		40,000
No traffic report	2	956	1	883			1	73	80,000		12,000
Oregon, Oregon	41	3,172	26	2,083	3	121	12	968	185,100	17,000	82,000
Passenger and freight	33	2,897	22	1,962	2	63	9	872	167,600	11,000	69,000
Fish	5	185	1	31	1	58	3	96	5,000	6,000	13,000
Harbor tugs	1	14	1	14					2,000		
No traffic report	2	76	2	76					10,500		
Willamette, Oregon	96	44,404	35	5,480	2	216	59	38,708	370,400	13,000	3,466,700
Passenger and freight	62	40,391	16	4,133			46	36,258	278,300		3,328,000
Ferry	14	1,747	4	143	2	216	8	1,388	21,500	13,000	81,700
Fish	3	79	3	79					20,000		
Harbor tugs	4	244	2	26			2	218	2,700		38,000
No traffic report	13	1,943	10	1,099			3	844	47,900		19,000

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 4.—OWNERSHIP BY LOCALITIES—Continued.

STEAMERS—Continued.

CLASSES AND CUSTOMS DISTRICTS.	Total number.	Total tonnage.	NUMBER AND TONNAGE BY OWNERSHIP.						VALUATION BY OWNERSHIP.		
			Individual.		Joint stock.		Corporate.		Individual.	Joint stock.	Corporate.
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.			
Puget sound, Washington	115	13,208	80	6,848	2	202	33	6,158	$575,650	$45,000	$620,700
Passenger and freight	93	10,642	69	6,051	1	79	23	4,512	522,650	20,000	433,200
Ferry	2	296	1	23			1	273	5,000		40,000
Fish	1	13					1	13			1,500
Harbor tugs	9	1,346	3	276	1	123	5	947	14,500	25,000	139,500
Yachts	2	45	2	45					4,000		
No traffic report	8	866	5	453			3	413	29,500		6,500

SAILING VESSELS.

CLASSES AND CUSTOMS DISTRICTS.	Total number.	Total tonnage.	Individual Number.	Individual Tonnage.	Joint stock Number.	Joint stock Tonnage.	Corporate Number.	Corporate Tonnage.	Valuation Individual.	Valuation Joint stock.	Valuation Corporate.
Total for California	697	162,946	647	150,051	1	594	49	12,301	5,365,175	15,000	373,800
San Diego, California	21	461	19	319			2	142	21,975		15,000
Freight	7	222	5	80			2	142	5,350		15,000
Fish	2	31	2	31					2,625		
Pilot boats	1	20	1	20					3,000		
Yachts	7	101	7	101					8,500		
No traffic report	4	87	4	87					2,500		
Wilmington, California	13	694	13	694					37,400		
Freight	8	588	8	588					27,400		
Pilot boats	1	8	1	8					2,500		
Yachts	4	98	4	98					7,500		
San Francisco, California	649	158,519	601	145,766	1	594	47	12,159	5,060,300	15,000	358,800
Freight	549	146,924	518	138,112	1	594	30	8,218	4,678,150	15,000	255,000
Fish	40	5,866	28	3,632			12	2,234	164,300		75,600
Pilot boats	4	230	4	230					24,500		
Yachts	13	405	13	405					52,800		
No traffic report	43	5,094	38	3,387			5	1,707	140,550		28,200
Humboldt, California	14	3,272	14	3,272					245,500		
Freight	13	3,091	13	3,091					241,000		
No traffic report	1	181	1	181					4,500		
Total for Oregon	43	2,776	42	2,712			1	64	87,065		10,000
Southern Oregon, Oregon: Freight	1	90	1	90					8,000		
Oregon, Oregon	36	690	35	626			1	64	40,080		10,000
Freight	14	220	14	220					10,350		
Fish	10	137	10	137					12,730		
Pilot boats	2	141	1	77			1	64	9,000		10,000
No traffic report	10	192	10	192					8,000		
Willamette, Oregon	6	1,996	6	1,996					38,985		
Freight	3	1,712	3	1,712					35,035		
No traffic report	3	284	3	284					3,950		
Puget sound, Washington	82	42,358	53	13,828	1	40	28	28,490	401,225	4,000	459,305
Freight	52	41,631	25	13,155			27	28,476	364,550		457,505
Fish	8	338	6	284	1	40	1	14	19,900	4,000	1,800
Pilot boats	1	19	1	19					700		
Yachts	1	8	1	8					500		
No traffic report	20	362	20	362					15,575		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 5.—CONSTRUCTION BY CLASSES—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS AND SAILING VESSELS ALLOTTED RESPECTIVELY TO THEIR MATERIALS OF CONSTRUCTION, AND GROUPED FOR EACH CLASS OF OCCUPATION.

ALL STEAMERS AND SAILING VESSELS.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
			Wood.		Composite.		Iron and steel.		Total valuation.	Wood.	Composite.	Iron and steel.
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.				
Total steam and sail	1,353	378,583	1,326	328,076	2	1,298	25	49,209	$22,242,025	$15,373,960	$110,000	$6,758,065
Total steam	531	170,503	506	121,202	1	1,089	24	48,212	15,526,455	8,708,390	100,000	6,718,065
Total sail	822	208,080	820	206,874	1	209	1	997	6,715,570	6,665,570	10,000	40,000
STEAMERS.												
PASSENGER AND FREIGHT.												
Total	354	129,491	336	82,262	1	1,089	17	46,140	12,660,755	6,162,690	100,000	6,398,065
California	147	73,833	133	45,982	1	1,089	13	26,762	7,657,705	3,759,640	100,000	3,798,065
Wilmington	5	756	5	756					149,500	149,500		
San Francisco	136	72,626	122	44,775	1	1,089	13	26,762	7,479,705	3,581,640	100,000	3,798,065
Humboldt	6	451	6	451					28,500	28,500		
Oregon	114	45,016	111	25,799			3	19,217	4,027,200	1,467,200		2,560,000
Southern Oregon	12	651	12	651					48,300	48,300		
Yaquina	7	1,077	6	160			1	917	125,000	30,000		95,000
Oregon	33	2,897	33	2,897					247,600	247,600		
Willamette	62	40,391	60	22,091			2	18,300	3,606,300	1,141,300		2,465,000
Washington—Puget sound	93	10,642	92	10,481			1	161	975,850	935,850		40,000
FERRY.												
Total	38	24,630	37	24,215			1	415	979,300	939,300		40,000
California	20	22,551	20	22,551					816,000	816,000		
San Diego	3	488	3	488					31,500	31,500		
San Francisco	17	22,063	17	22,063					784,500	784,500		
Oregon	16	1,783	15	1,368			1	415	118,300	78,300		40,000
Southern Oregon	1	20	1	20					1,200	1,200		
Yaquina	1	16	1	16					900	900		
Willamette	14	1,747	13	1,332			1	415	116,200	76,200		40,000
Washington—Puget sound	2	296	2	296					45,000	45,000		
FISH.												
Total	24	4,343	24	4,343					411,500	411,500		
California—San Francisco	14	3,960	14	3,960					341,000	341,000		
Oregon	9	370	9	370					69,000	69,000		
Yaquina	1	106	1	106					25,000	25,000		
Oregon	5	185	5	185					24,000	24,000		
Willamette	3	79	3	79					20,000	20,000		
Washington—Puget sound	1	13	1	13					1,500	1,500		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 5.—CONSTRUCTION BY CLASSES—Continued.

STEAMERS—Continued.

HARBOR TUGS.

CUSTOMS DISTRICTS.	Total number	Total tonnage.	NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
			Wood.		Composite.		Iron and steel.		Total valuation.	Wood.	Composite.	Iron and steel.
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.				
Total	70	6, 109	66	5, 540			4	569	$1, 120, 800	$985, 800		$135, 000
California	52	4, 279	50	3, 928			2	351	833, 500	736, 500		97, 000
San Diego	4	294	4	294					28, 500	28, 500		
Wilmington	1	89	1	89					22, 000	22, 000		
San Francisco	44	3, 626	42	3, 275			2	351	732, 000	635, 000		97, 000
Humboldt	3	270	[illegible]	270					51, 000	51, 000		
Oregon	[illegible]	484	7	266			2	218	108, 300	70, 300		38, 000
Southern Oregon	2	100	2	100					21, 100	21, 100		
Yaquina	2	126	2	126					44, 500	44, 500		
Oregon	1	14	1	14					2, 000	2, 000		
Willamette	4	244	2	26			2	218	40, 700	2, 700		38, 000
Washington—Puget sound	[illegible]	1, 346	9	1, 346					179, 000	179, 000		

YACHTS.

CUSTOMS DISTRICTS.	Total number	Total tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	3	63	3	63					6, 500	6, 500		
California—San Diego	1	18	1	18					2, 500	2, 500		
Washington—Puget sound	2	45	2	45					4, 000	4, 000		

NO TRAFFIC REPORT.

CUSTOMS DISTRICTS.	Total number	Total tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	42	5, 867	40	4, 779			2	1, 088	347, 600	202, 600		145, 000
California	17	2, 026	16	1, 821			1	205	142, 200	77, 200		65, 000
Wilmington	4	88	4	88					17, 000	17, 000		
San Francisco	12	1, 874	11	1, 669			1	205	122, 200	57, 200		65, 000
Humboldt	1	64	1	64					3, 000	3, 000		
Oregon	17	2, 975	16	2, 092			1	883	169, 400	89, 400		80, 000
Yaquina	2	956	1	73			1	883	92, 000	12, 000		80, 000
Oregon	2	76	2	76					10, 500	10, 500		
Willamette	13	1, 943	13	1, 943					66, 900	66, 900		
Washington—Puget sound	8	866	8	866					36, 000	36, 000		

SAILING VESSELS.

FREIGHT.

CUSTOMS DISTRICTS.	Total number	Total tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total	647	194, 478	645	193, 272	1	209	1	997	6, 112, 340	6, 062, 340	10, 000	40, 000
California	577	150, 825	575	149, 619	1	209	1	997	5, 236, 900	5, 186, 900	10, 000	40, 000
San Diego	7	222	7	222					20, 350	20, 350		
Wilmington	8	588	8	588					27, 400	27, 400		
San Francisco	549	146, 924	547	145, 718	1	209	1	997	4, 948, 150	4, 898, 150	10, 000	40, 000
Humboldt	13	3, 091	13	3, 091					241, 000	241, 000		
Oregon	18	2, 022	18	2, 022					53, 385	53, 385		
Southern Oregon	1	90	1	90					8, 000	8, 000		
Oregon	14	220	14	220					10, 350	10, 350		
Willamette	3	1, 712	3	1, 712					35, 035	35, 035		
Washington—Puget sound	52	41, 631	52	41, 631					822, 055	822, 055		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 5.—CONSTRUCTION BY CLASSES—Continued.

SAILING VESSELS—Continued.

FISH.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
			Wood.		Composite.		Iron and steel.		Total valuation.	Wood.	Compos-ite.	Iron and steel.
			Num-ber.	Tonnage.	Num-ber.	Tonnage.	Num-ber.	Tonnage.				
Total	60	6,372	60	6,372					$280,955	$280,955		
California	42	5,897	42	5,897					242,525	242,525		
San Diego	2	31	2	31					2,625	2,625		
San Francisco	40	5,866	40	5,866					239,900	239,900		
Oregon—Oregon	10	137	10	137					12,730	12,730		
Washington—Puget sound	8	338	8	338					25,700	25,700		

PILOT BOATS.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	Wood Num-ber.	Wood Tonnage.	Composite Num-ber.	Composite Tonnage.	Iron and steel Num-ber.	Iron and steel Tonnage.	Total valuation.	Wood.	Compos-ite.	Iron and steel.
Total	9	418	9	418					49,700	49,700		
California	6	258	6	258					30,000	30,000		
San Diego	1	20	1	20					3,000	3,000		
Wilmington	1	8	1	8					2,500	2,500		
San Francisco	4	230	4	230					24,500	24,500		
Oregon—Oregon	2	141	2	141					19,000	19,000		
Washington—Puget sound	1	19	1	19					700	700		

YACHTS.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	Wood Num-ber.	Wood Tonnage.	Composite Num-ber.	Composite Tonnage.	Iron and steel Num-ber.	Iron and steel Tonnage.	Total valuation.	Wood.	Compos-ite.	Iron and steel.
Total	25	612	25	612					69,300	69,300		
California	24	604	24	604					68,800	68,800		
San Diego	7	101	7	101					8,500	8,500		
Wilmington	4	98	4	98					7,500	7,500		
San Francisco	13	405	13	405					52,800	52,800		
Washington—Puget sound	1	8	1	8					500	500		

NO TRAFFIC REPORT.

CUSTOMS DISTRICTS.	Total number.	Total tonnage.	Wood Num-ber.	Wood Tonnage.	Composite Num-ber.	Composite Tonnage.	Iron and steel Num-ber.	Iron and steel Tonnage.	Total valuation.	Wood.	Compos-ite.	Iron and steel.
Total	81	6,200	81	6,200					203,275	203,275		
California	48	5,362	48	5,362					175,750	175,750		
San Diego	4	87	4	87					2.500	2,500		
San Francisco	43	5,094	43	5,094					168,750	168,750		
Humboldt	1	181	1	181					4,500	4,500		
Orgeon	13	476	13	476					11,950	11,950		
Oregon	10	192	10	192					8,000	8,000		
Willamette	3	284	3	284					3,950	3,950		
Washington—Puget sound	20	362	20	362					15,575	15,575		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 6.—CONSTRUCTION BY LOCALITIES—NUMBER, TONNAGE, AND VALUATION OF ALL STEAMERS AND SAILING VESSELS ALLOTTED RESPECTIVELY TO THEIR MATERIALS OF CONSTRUCTION, AND GROUPED BY DISTRICTS.

ALL STEAMERS AND SAILING VESSELS.

CLASSES AND CUSTOMS DISTRICTS.	Total number.	Total tonnage.	NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION.						VALUATION BY MATERIALS OF CONSTRUCTION.			
			Wood.		Composite.		Iron and steel.					
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total steam and sail	1,353	378,583	1,326	328,076	2	1,298	25	49,209	$22,242,025	$15,373,960	$110,000	$6,758,065
Total steam	531	170,503	506	121,202	1	1,089	24	48,212	15,526,455	8,708,390	100,000	6,718,065
Total sail	822	208,080	820	206,874	1	209	1	997	6,715,570	6,665,570	10,000	40,000

STEAMERS.

CLASSES AND CUSTOMS DISTRICTS.	Total number.	Total tonnage.	Wood Number.	Wood Tonnage.	Composite Number.	Composite Tonnage.	Iron and steel Number.	Iron and steel Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total for California	251	106,667	234	78,260	1	1,089	16	27,318	9,792,905	5,732,840	100,000	3,960,065
San Diego, California	8	800	8	800					62,500	62,500		
Ferry	3	488	3	488					31,500	31,500		
Harbor tugs	4	294	4	294					28,500	28,500		
Yachts	1	18	1	18					2,500	2,500		
Wilmington, California	10	933	10	933					188,500	188,500		
Passenger and freight	5	756	5	756					149,500	149,500		
Harbor tugs	1	89	1	89					22,000	22,000		
No traffic report	4	88	4	88					17,000	17,000		
San Francisco, California	223	104,149	206	75,742	1	1,089	16	27,318	9,459,405	5,399,340	100,000	3,960,065
Passenger and freight	136	72,626	122	44,775	1	1,089	13	26,762	7,479,705	3,581,640	100,000	3,798,065
Ferry	17	22,063	17	22,063					784,500	784,500		
Fish	14	3,960	14	3,960					341,000	341,000		
Harbor tugs	44	3,626	42	3,275			2	351	732,000	635,000		97,000
No traffic report	12	1,874	11	1,669			1	205	122,200	57,200		65,000
Humboldt, California	10	785	10	785					82,500	82,500		
Passenger and freight	6	451	6	451					28,500	28,500		
Harbor tugs	3	270	3	270					51,000	51,000		
No traffic report	1	64	1	64					3,000	3,000		
Total for Oregon	165	50,628	158	29,895			7	20,733	4,492,200	1,774,200		2,718,000
Southern Oregon	15	771	15	771					70,600	70,600		
Passenger and freight	12	651	12	651					48,300	48,300		
Ferry	1	20	1	20					1,200	1,200		
Harbor tugs	2	100	2	100					21,100	21,100		
Yaquina, Oregon	13	2,281	11	481			2	1,800	287,400	112,400		175,000
Passenger and freight	7	1,077	6	160			1	917	125,000	30,000		95,000
Ferry	1	16	1	16					900	900		
Fish	1	106	1	106					25,000	25,000		
Harbor tugs	2	126	2	126					44,500	44,500		
No traffic report	2	956	1	73			1	883	92,000	12,000		80,000
Oregon, Oregon	41	3,172	41	3,172					284,100	284,100		
Passenger and freight	33	2,897	33	2,897					247,600	247,600		
Fish	5	185	5	185					24,000	24,000		
Harbor tugs	1	14	1	14					2,000	2,000		
No traffic report	2	76	2	76					10,500	10,500		
Willamette, Oregon	96	44,404	91	25,471			5	18,933	3,850,100	1,307,100		2,543,000
Passenger and freight	62	40,391	60	22,091			2	18,300	3,606,300	1,141,300		2,465,000
Ferry	14	1,747	13	1,332			1	415	116,200	76,200		40,000
Fish	3	79	3	79					20,000	20,000		
Harbor tugs	4	244	2	26			2	218	40,700	2,700		38,000
No traffic report	13	1,943	13	1,943					66,900	66,900		

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 6.—CONSTRUCTION BY LOCALITIES—Continued.

STEAMERS—Continued.

CLASSES AND CUSTOMS DISTRICTS.	Total number.	Total tonnage.	NUMBER AND TONNAGE BY MATERIALS OF CONSTRUCTION. Wood.		Composite.		Iron and steel.		VALUATION BY MATERIALS OF CONSTRUCTION. Total valuation.	Wood.	Composite.	Iron and steel.
			Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.				
Puget sound, Washington	115	13, 208	114	13, 047			1	161	$1, 241, 350	$1, 201, 350		$40, 000
Passenger and freight	93	10, 642	92	10, 481			1	161	975, 850	935, 850		40, 000
Ferry	2	296	2	296					45, 000	45, 000		
Fish	1	13	1	13					1, 500	1, 500		
Harbor tugs	9	1, 346	9	1, 346					179, 000	179, 000		
Yachts	2	45	2	45					4, 000	4, 000		
No traffic report	8	866	8	866					36, 000	36, 000		

SAILING VESSELS.

CLASSES AND CUSTOMS DISTRICTS.	Total number.	Total tonnage.	Wood. Number.	Wood. Tonnage.	Composite. Number.	Composite. Tonnage.	Iron and steel. Number.	Iron and steel. Tonnage.	Total valuation.	Wood.	Composite.	Iron and steel.
Total for California	697	162, 946	695	161, 740	1	209	1	997	5, 753, 975	5, 703, 975	$10, 000	40, 000
San Diego, California	21	461	21	461					36, 975	36, 975		
Freight	7	222	7	222					20, 350	20, 350		
Fish	2	31	2	31					2, 625	2, 625		
Pilot boats	1	20	1	20					3, 000	3, 000		
Yachts	7	101	7	101					8, 500	8, 500		
No traffic report	4	87	4	87					2, 500	2, 500		
Wilmington, California	13	694	13	694					37, 400	37, 400		
Freight	8	588	8	588					27, 400	27, 400		
Pilot boats	1	8	1	8					2, 500	2, 500		
Yachts	4	98	4	98					7, 500	7, 500		
San Francisco, California	649	158, 519	647	157, 313	1	209	1	997	5, 434, 100	5, 384, 100	10, 000	40, 000
Freight	549	146, 924	547	145, 718	1	209	1	997	4, 948, 150	4, 898, 150	10, 000	40, 000
Fish	40	5, 866	40	5, 866					239, 900	239, 900		
Pilot boats	4	230	4	230					24, 500	24, 500		
Yachts	13	405	13	405					52, 800	52, 800		
No traffic report	43	5, 094	43	5, 094					168, 750	168, 750		
Humboldt, California	14	3, 272	14	3, 272					245, 500	245, 500		
Freight	13	3, 091	13	3, 091					241, 000	241, 000		
No traffic report	1	181	1	181					4, 500	4, 500		
Total for Oregon	43	2, 776	43	2, 776					97, 065	97, 065		
Southern district Oregon, Oregon: Freight	1	90	1	90					8, 000	8, 000		
Oregon, Oregon	36	690	36	690					50, 080	50, 080		
Freight	14	220	14	220					10, 350	10, 350		
Fish	10	137	10	137					12, 730	12, 730		
Pilot boats	2	141	2	141					19, 000	19, 000		
No traffic report	10	192	10	192					8, 000	8, 000		
Willamette, Oregon	6	1, 996	6	1, 996					38, 985	38, 985		
Freight	3	1, 712	3	1, 712					35, 035	35, 035		
No traffic report	3	284	3	284					3, 950	3, 950		
Puget sound, Washington	82	42, 358	82	42, 358					864, 530	864, 530		
Freight	52	41, 631	52	41, 631					822, 055	822, 055		
Fish	8	338	8	338					25, 700	25, 700		
Pilot boats	1	19	1	19					700	700		
Yachts	1	8	1	8					500	500		
No traffic report	20	362	20	362					15, 575	15, 575		

TRAFFIC OPERATIONS.

TABLE 7.—TRAFFIC IN GENERAL—TRIPS, MILES COVERED, PASSENGERS CARRIED, AND TONS OF FREIGHT MOVED BY ALL OPERATING CRAFT ON THE PACIFIC COAST IN 1889, EXCLUSIVE OF FISHING VESSELS NOT ENGAGED IN THE TRANSPORTATION OF FISHING PRODUCTS AS FREIGHT.

CUSTOMS DISTRICTS.	ALL CRAFT.				STEAMERS.				SAILING VESSELS.			UNRIGGED CRAFT.
	Trips.	Miles.	Freight. (Tons.)	Passengers.	Trips.	Miles.	Freight. (Tons.)	Passengers.	Trips.	Miles.	Freight. (Tons.)	Freight. (Tons.)
Total	672, 670	12, 273, 515	8, 818, 363	4, 019, 329	633, 684	6, 766, 160	5, 741, 940	4, 019, 329	38, 986	5, 507. 355	2, 761, 826	314, 597
California	236, 216	8, 239, 608	5, 148, 940	825, 177	199, 917	3, 323, 122	2, 684, 383	825, 177	36, 299	4, 916, 486	2, 401, 593	62, 964
San Diego	39, 224	59, 141	35, 384	545, 558	39, 158	43, 867	20	545, 558	66	15, 274	2, 300	33, 064
Wilmington	639	75, 188	152, 297	12, 305	410	48, 752	144, 726	12, 305	229	26, 436	7, 571	....
San Francisco	192, 011	7, 979, 209	4, 799, 553	242, 354	156, 843	3, 207, 096	2, 420, 955	242, 354	35, 168	4, 772, 113	2, 351, 598	27, 000
Humboldt	4, 342	126, 070	161, 706	24, 960	3, 506	23, 407	118, 682	24, 960	836	102, 663	40, 124	2, 900
Oregon	390, 704	1, 848, 497	1, 027, 617	2, 698, 503	389, 096	1, 789, 435	905, 677	2, 698, 503	1, 608	59, 062	34, 050	87, 890
Southern Oregon	6, 727	107, 142	178, 275	33, 860	6, 706	98, 222	119, 499	33. 860	21	8, 920	2, 916	55, 860
Yaquina	4, 000	68. 158	31, 583	15, 722	4, 000	68, 158	*a*31, 583	15, 722	....	....	....	(*b*)
Oregon	15. 256	295. 818	263. 227	98, 006	13, 692	276. 076	242, 130	98, 006	1, 564	19, 742	21, 097	(*b*)
Willamette	364, 721	1, 377, 379	554, 532	2, 550, 915	364, 698	1, 346, 979	512, 465	2, 550, 915	23	30, 400	10, 037	32, 030
Washington — Puget sound.	45, 750	2, 185. 410	2, 641, 806	495, 649	44, 671	1, 653, 603	2, 151, 880	495, 649	1, 079	531, 807	326, 183	163, 743

a Includes unrigged craft.

b Included in steamers.

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT TRAFFIC BY COMMODITIES—PRINCIPAL COMMODITIES IN TONS OF THE TOTAL FREIGHT MOVED BY ALL OPERATING CRAFT ON THE PACIFIC COAST IN 1889.

ALL CRAFT.

CUSTOMS DISTRICTS.	Total of all commodities.	Agricultural products.	Coal.	Mines and quarries.	Lumber and other forest products.	Animal products including fish.	Manufactures and general merchandise.
Total for all craft	8, 818, 363	1, 152, 100	1, 075, 600	522, 497	4, 239, 656	74, 509	1, 754, 001
STEAMERS.							
Total	5, 741, 940	851, 041	407, 635	305, 551	3, 023, 547	30, 706	1, 123, 460
California	2, 684, 383	754, 423	355, 726	192, 333	616, 045	12, 275	753, 581
San Diego	20	...	...	...	...	20	...
Wilmington	144, 726	148	67, 235	50, 000	8, 620	...	18, 723
San Francisco	2, 420, 955	753, 683	288, 491	98, 032	537, 381	12, 176	731, 192
Humboldt	118, 682	592	...	44, 301	70, 044	79	3, 666
Oregon	905, 677	50, 382	50, 872	62, 034	590, 032	12, 660	139, 697
Southern Oregon	119, 499	940	25	502	113, 877	150	4, 005
Yaquina	31, 583	14, 762	...	...	881	1, 534	14, 406
Oregon	242, 130	5, 476	160	5, 380	201, 407	2, 972	26, 735
Willamette	512, 465	29, 204	50, 687	56, 152	273, 867	8, 004	94, 551
Washington—Puget sound	2, 151, 880	46, 236	1, 037	51, 184	1, 817, 470	5, 771	230, 182
SAILING VESSELS.							
Total	2, 761, 826	262, 559	627, 995	214, 946	1, 154, 325	43, 803	458, 198
California	2, 401, 593	253, 325	569, 842	210, 006	921, 153	37, 590	409, 677
San Diego	2, 300	...	...	120	...	102	2, 078
Wilmington	7, 571	...	...	10	7, 445	80	36
San Francisco	2, 351, 598	253, 225	569, 842	208, 333	877, 331	37, 408	405, 459
Humboldt	40, 124	100	...	1, 543	36, 377	...	2, 104
Oregon	34, 050	912	...	42	17, 386	4, 133	11, 577
Southern Oregon	2, 916	...	...	...	2, 466	...	450
Oregon	21, 097	597	...	42	14, 481	3, 433	2, 544
Willamette	10, 037	315	...	...	439	700	8, 583
Washington—Puget sound	326, 183	8, 322	58, 153	4, 898	215, 786	2, 080	36, 944
UNRIGGED CRAFT.							
Total	314, 597	38, 500	39, 970	2, 000	61, 784	...	172, 343
San Diego, California	33, 064	...	19, 790	...	13, 274	...	...
San Francisco, California	27, 000	18, 500	...	...	8, 500	...	...
Humboldt, California	2, 900	...	...	...	900	...	2, 000
Southern Oregon, Oregon	55, 860	20, 000	...	...	25, 860	...	10, 000
Willamette, Oregon	32, 030	...	17, 030	...	8, 000	...	7, 000
Puget sound, Washington	163, 743	...	3, 150	2, 000	5, 250	...	153, 343

TRAFFIC OPERATIONS—Continued.

TABLE 9.—INTERDISTRICT MOVEMENT (FREIGHT)—AMOUNT OF EACH COMMODITY MOVED WITHIN OR BETWEEN WELL DEFINED TRAFFIC DISTRICTS BY ALL OPERATING CRAFT OF EACH CUSTOMS DISTRICT. (*a*)

ALL CRAFT.

INTERDISTRICT MOVEMENT.		COMMODITIES (IN TONS).						
From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		8, 818, 363	1, 075, 600	4. 239, 656	522, 497	1, 152, 100	74, 509	1, 754, 001

SAN DIEGO, CALIFORNIA (STEAMERS AND UNRIGGED CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
1 Southern California coast	1 Southern California coast	33, 084	19, 790	13, 274			20	

SAN DIEGO, CALIFORNIA (SAILING VESSELS).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		2, 300			120		102	2, 078
2 San Francisco bay and rivers	7 Foreign	80			80			
1 Southern California coast	1 Southern California coast	1, 823					90	1, 733
Do	7 Foreign	225						225
7 Foreign	1 Southern California coast	52			40		12	
Do	7 Foreign	120						120

SAN DIEGO, CALIFORNIA (ALL CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		35, 384	19, 790	13, 274	120		122	2, 078
2 San Francisco bay and rivers	7 Foreign	80			80			
1 Southern California coast	1 Southern California coast	34, 907	19, 790	13, 274			110	1, 733
Do	7 Foreign	225						225
7 Foreign	1 Southern California coast	52			40		12	
Do	7 Foreign	120						120

WILMINGTON, CALIFORNIA (STEAMERS AND UNRIGGED CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		144, 726	67, 235	8, 620	50, 000	148		18, 723
4 Oregon coast	1 Southern California coast	8, 768		8, 620		148		
1 Southern California coast	4 Oregon coast	27						27
Do	1 Southern California coast	135, 931	67, 235		50. 000			18, 696

WILMINGTON, CALIFORNIA (SAILING VESSELS).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		7, 571		7, 445	10		80	36
6 Puget sound and Washington	1 Southern California coast	1, 400		1, 400				
4 Oregon coast	do	1, 450		1, 450				
3 Northern California coast	do	4, 500		4, 500				
1 Southern California coast	do	221		95	10		80	36

WILMINGTON, CALIFORNIA (ALL CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		152, 297	67, 235	16, 065	50, 010	148	80	18, 759
6 Puget sound and Washington	1 Southern California coast	1, 400		1, 400				
4 Oregon coast	do	10, 218		10, 070		148		
3 Northern California coast	do	4, 500		4, 500				
1 Southern California coast	do	136, 152	67, 235	95	50, 010		80	18, 732
Do	4 Oregon coast	27						27

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a See page 7.

TRAFFIC OPERATIONS—Continued.

TABLE 9.—INTERDISTRICT MOVEMENT (FREIGHT)—Continued.

SAN FRANCISCO, CALIFORNIA (STEAMERS AND UNRIGGED CRAFT).

INTERDISTRICT MOVEMENT.		COMMODITIES (IN TONS).						
From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		2,447,955	288,491	545,881	98,032	772,183	12,176	731,192
6 Puget sound and Washington	2 San Francisco bay and rivers	92,125	67,853	24,272				
Do	1 Southern California coast	1,730		1,212			518	
4 Oregon coast	2 San Francisco bay and rivers	81,208	50,000	28,447		2,761		
Do	1 Southern California coast	1,208		988		220		
3 Northern California coast	3 Northern California coast	47,074		1,024	45,000		1,050	
Do	2 San Francisco bay and rivers	264,047		256,283		6,418	1,346	
Do	1 Southern California coast	48,803		48,294				509
Do	7 Foreign	941		941				
2 San Francisco bay and rivers	6 Puget sound and Washington	13,969						13,969
Do	4 Oregon coast	11,503						11,503
Do	3 Northern California coast	32,260						32,260
Do	2 San Francisco bay and rivers	1,222,223	56,981	143,933	22,024	641,023	6,150	352,112
Do	1 Southern California coast	319,491	43,700	3,675				272,116
Do	7 Foreign	19,014						19,014
Do	9 Alaska and Bering sea	18,897	177					18,720
1 Southern California coast	2 San Francisco bay and rivers	161,275		36,416	15,318	109,041	500	
Do	1 Southern California coast	12,000				12,000		
Do	7 Foreign	3,370	270	200		682		2,218
7 Foreign	6 Puget sound and Washington	15,600			15,600			
Do	5 Columbia and Willamette rivers	4,245	4,245					
Do	2 San Francisco bay and rivers	73,181	64,236	188				8,757
Do	1 Southern California coast	35				25	10	
Do	9 Alaska and Bering sea	1,029	1,029					
9 Alaska and Bering sea	2 San Francisco bay and rivers	2,602					2,602	
Do	9 Alaska and Bering sea	125		8	90	13		14

SAN FRANCISCO, CALIFORNIA (SAILING VESSELS).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		2,351,598	569,842	877,331	208,333	253,225	37,408	405,459
6 Puget sound and Washington	6 Puget sound and Washington	2,547	1,651					896
Do	5 Columbia and Willamette rivers	905		905				
Do	3 Northern California coast	321		321				
Do	2 San Francisco bay and rivers	415,633	238,041	177,279				313
Do	1 Southern California coast	36,632	3,647	32,985				
Do	7 Foreign	61,764		61,764				
Do	9 Alaska and Bering sea	800		800				
5 Columbia and Willamette rivers	3 Northern California coast	2,445		2,445				
Do	2 San Francisco bay and rivers	40,515		39,838				677
Do	1 Southern California coast	9,493		9,461		32		
Do	7 Foreign	2,847		2,847				
4 Oregon coast	2 San Francisco bay and rivers	101,632		100,268			945	419
Do	1 Southern California coast	5,588		5,588				
Do	7 Foreign	1,160		1,160				
3 Northern California coast	6 Puget sound and Washington	485		485				
Do	5 Columbia and Willamette rivers	635		635				
Do	2 San Francisco bay and rivers	246,024	3,375	239,439		2,384	126	700
Do	1 Southern California coast	37,960	1,125	36,825				10
Do	7 Foreign	7,383		7,383				
2 San Francisco bay and rivers	6 Puget sound and Washington	27,348						27,348
Do	5 Columbia and Willamette rivers	11,905						11,905
Do	4 Oregon coast	10,589	56					10,533
Do	3 Northern California coast	7,423						7,423
Do	2 San Francisco bay and rivers	820,828	112,459	128,654	200,784	233,466	7,918	137,547
Do	1 Southern California coast	1,476		1,476				
Do	7 Foreign	108,378	3,280	6,236		14,578		84,284
Do	9 Alaska and Bering sea	28,370	3,685	1,245				23,440
1 Southern California coast	6 Puget sound and Washington	165						165
Do	5 Columbia and Willamette rivers	750						750
Do	2 San Francisco bay and rivers	33						33
Do	1 Southern California coast	535					510	25
Do	7 Foreign	1,125		600	400			125
Do	9 Alaska and Bering sea	638						638
7 Foreign	6 Puget sound and Washington	2,758	2,016					742
Do	2 San Francisco bay and rivers	224,664	124,365	6,054	4,013	2,765	1,605	85,862
Do	1 Southern California coast	33,685	33,685					
Do	7 Foreign	38,658	24,916	12,612			230	900
Do	8 Atlantic ports	3,136			3,136			
Do	9 Alaska and Bering sea	1,500	1,500					
8 Atlantic ports	2 San Francisco bay and rivers	5,550						5,550
Do	7 Foreign	3,560						3,560
9 Alaska and Bering sea	6 Puget sound and Washington	1,820					1,820	
Do	2 San Francisco bay and rivers	41,734	16,041	26			24,053	1,614
Do	7 Foreign	201					201	

TRAFFIC OPERATIONS—Continued.

TABLE 9.—INTERDISTRICT MOVEMENT (FREIGHT)—Continued.

SAN FRANCISCO, CALIFORNIA (ALL CRAFT).

INTERDISTRICT MOVEMENT.		COMMODITIES (IN TONS).						
From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		4,799,553	858,333	1,423,212	306,365	1,025,408	49,584	1,136,651
6 Puget sound and Washington	6 Puget sound and Washington	2,547	1,651					896
Do	5 Columbia and Willamette rivers	905		905				
Do	3 Northern California coast	321		321				
Do	2 San Francisco bay and rivers	507,758	305,894	201,551				313
Do	1 Southern California coast	38,362	3,647	34,197			518	
Do	7 Foreign	61,764		61,764				
Do	9 Alaska and Bering sea	800		800				
5 Columbia and Willamette rivers	3 Northern California coast	2,445		2,445				
Do	2 San Francisco bay and rivers	40,515		39,838				677
Do	1 Southern California coast	9,493		9,461		32		
Do	7 Foreign	2,847		2,847				
4 Oregon coast	2 San Francisco bay and rivers	182,840	50,000	128,715		2,761	945	419
Do	1 Southern California coast	6,796		6,576		220		
Do	7 Foreign	1,160		1,160				
3 Northern California coast	6 Puget sound and Washington	485		485				
Do	5 Columbia and Willamette rivers	635		635				
Do	3 Northern California coast	47,074		1,024	45,000		1,050	
Do	2 San Francisco bay and rivers	510,071	3,375	495,722		8,802	1,472	700
Do	1 Southern California coast	86,763	1,125	85,119				519
Do	7 Foreign	8,324		8,324				
2 San Francisco bay and rivers	6 Puget sound and Washington	41,317						41,317
Do	5 Columbia and Willamette rivers	11,905						11,905
Do	4 Oregon coast	22,092	56					22,036
Do	3 Northern California coast	39,683						39,683
Do	2 San Francisco bay and rivers	2,043,051	169,440	272,587	222,808	874,489	14,068	489,659
Do	1 Southern California coast	320,967	43,700	5,151				272,116
Do	7 Foreign	127,392	3,280	6,236		14,578		103,298
Do	9 Alaska and Bering sea	47,267	3,862	1,245				42,160
1 Southern California coast	6 Puget sound and Washington	165						165
Do	5 Columbia and Willamette rivers	750						750
Do	2 San Francisco bay and rivers	161,308		36,416	15,318	109,041	500	33
Do	1 Southern California coast	12,535				12,000	510	25
Do	7 Foreign	4,495	270	800	400	682		2,343
Do	9 Alaska and Bering sea	638						638
7 Foreign	6 Puget sound and Washington	18,358	2,016		15,600			742
Do	5 Columbia and Willamette rivers	4,245	4,245					
Do	2 San Francisco bay and rivers	297,845	188,601	6,242	4,013	2,765	1,605	94,619
Do	1 Southern California coast	33,720	33,685			25	10	
Do	7 Foreign	38,658	24,916	12,612			230	900
Do	8 Atlantic ports	3,136			3,136			
Do	9 Alaska and Bering sea	2,529	2,529					
8 Atlantic ports	2 San Francisco bay and rivers	5,550						5,550
Do	7 Foreign	3,560						3,560
9 Alaska and Bering sea	6 Puget sound and Washington	1,820					1,820	
Do	2 San Francisco bay and rivers	44,336	16,041	26			26,655	1,614
Do	7 Foreign	201					201	
Do	9 Alaska and Bering sea	125		8	90	13		14

HUMBOLDT, CALIFORNIA (STEAMERS AND UNRIGGED CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
3 Northern California coast	3 Northern California coast	121,582		70,944	44,301	592	79	5,666

HUMBOLDT, CALIFORNIA (SAILING VESSELS).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		40,124		36,377	1,543	100		2,104
6 Puget sound and Washington	2 San Francisco bay and rivers	4,781		4,781				
5 Columbia and Willamette rivers	do	400		400				
Do	1 Southern California coast	625		625				
4 Oregon coast	2 San Francisco bay and rivers	1,608		1,608				
3 Northern California coast	6 Puget sound and Washington	455		455				
Do	5 Columbia and Willamette rivers	625		625				
Do	3 Northern California coast	5,880		5,780		100		
Do	2 San Francisco bay and rivers	11,603		11,603				
Do	1 Southern California coast	7,520		7,520				
Do	7 Foreign	2,065		2,065				
2 San Francisco bay and rivers	6 Puget sound and Washington	100						100
Do	5 Columbia and Willamette rivers	100						100
Do	3 Northern California coast	200						200
Do	7 Foreign	1,887		915				972
7 Foreign	2 San Francisco bay and rivers	2,275			1,543			732

TRAFFIC OPERATIONS—Continued.

TABLE 9.—INTERDISTRICT MOVEMENT (FREIGHT)—Continued.

HUMBOLDT, CALIFORNIA (ALL CRAFT).

INTERDISTRICT MOVEMENT.		COMMODITIES (IN TONS).						
From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		161,706		107,321	45,844	692	79	7,770
6 Puget sound and Washington	2 San Francisco bay and rivers	4,781		4,781				
5 Columbia and Willamette rivers	do	400		400				
Do	1 Southern California coast	625		625				
4 Oregon coast	2 San Francisco bay and rivers	1,608		1,608				
3 Northern California coast	6 Puget sound and Washington	455		455				
Do	5 Columbia and Willamette rivers	625		625				
Do	3 Northern California coast	127,462		76,724	44,301	692	79	5,666
Do	2 San Francisco bay and rivers	11,603		11,603				
Do	1 Southern California coast	7,520		7,520				
Do	7 Foreign	2,065		2,065				
2 San Francisco bay and rivers	6 Puget sound and Washington	100						100
Do	5 Columbia and Willamette rivers	100						100
Do	3 Northern California coast	200						200
Do	7 Foreign	1,887		915				972
7 Foreign	2 San Francisco bay and rivers	2,275			1,543			732

SOUTHERN DISTRICT OREGON, OREGON (STEAMERS AND UNRIGGED CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
4 Oregon coast	4 Oregon coast	175,359	25	139,737	502	20,940	150	14,005

SOUTHERN DISTRICT OREGON, OREGON (SAILING VESSELS).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		2,916		2,466				450
4 Oregon coast	2 San Francisco bay and rivers	2,204		2,204				
Do	1 Southern California coast	262		262				
2 San Francisco bay and rivers	4 Oregon coast	450						450

SOUTHERN DISTRICT OREGON, OREGON (ALL CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		178,275	25	142,203	502	20,940	150	14,455
4 Oregon coast	4 Oregon coast	175,359	25	139,737	502	20,940	150	14,005
Do	2 San Francisco bay and rivers	2,204		2,204				
Do	1 Southern California coast	262		262				
2 San Francisco bay and rivers	4 Oregon coast	450						450

YAQUINA, OREGON (STEAMERS AND UNRIGGED CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		31,583		881		14,762	1,534	14,406
5 Columbia and Willamette rivers	4 Oregon coast	1,343		83		100		1,160
4 Oregon coast	5 Columbia and Willamette rivers	1,094		184		85	825	
Do	4 Oregon coast	2,453		494			709	1,250
Do	2 San Francisco bay and rivers	4,603		120				4,483
2 San Francisco bay and rivers	4 Oregon coast	22,090				14,577		7,513

OREGON, OREGON (STEAMERS AND UNRIGGED CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		242,130	160	201,407	5,380	5,476	2,972	26,735
6 Puget sound and Washington	6 Puget sound and Washington	100,464		94,781		1,221	563	3,899
Do	5 Columbia and Willamette rivers	427					427	
Do	4 Oregon coast	400						400
5 Columbia and Willamette rivers	6 Puget sound and Washington	315						315
Do	5 Columbia and Willamette rivers	104,547	160	77,267	4,420	3,180	1,982	17,538
Do	4 Oregon coast	250						250
Do	2 San Francisco bay and rivers	1,805		1,345		460		
Do	1 Southern California coast	1,300		1,000		300		
4 Oregon coast	6 Puget sound and Washington	212						212
Do	4 Oregon coast	28,930		27,014	960	315		641
2 San Francisco bay and rivers	5 Columbia and Willamette rivers	2,288						2,288
1 Southern California coast	do	1,192						1,192

TRAFFIC OPERATIONS—Continued.

TABLE 9.—INTERDISTRICT MOVEMENT (FREIGHT)—Continued.

OREGON, OREGON (SAILING VESSELS).

INTERDISTRICT MOVEMENT.		COMMODITIES (IN TONS).						
From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		21,097		14,481	42	597	3,433	2,544
6 Puget sound and Washington	6 Puget sound and Washington	2,576					2,551	25
5 Columbia and Willamette rivers	5 Columbia and Willamette rivers	18,503		14,478	40	597	877	2,511
Do	4 Oregon coast	5		3	2			
4 Oregon coast	5 Columbia and Willamette rivers	8						8
7 Foreign	9 Alaska and Bering sea	5					5	

OREGON, OREGON (ALL CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		263,227	160	215,888	5,422	6,073	6,405	29,279
6 Puget sound and Washington	6 Puget sound and Washington	103,040		94,781		1,221	3,114	3,924
Do	5 Columbia and Willamette rivers	427					427	
Do	4 Oregon coast	400						400
5 Columbia and Willamette rivers	6 Puget sound and Washington	315						315
Do	5 Columbia and Willamette rivers	123,050	160	91,745	4,460	3,777	2,859	20,049
Do	4 Oregon coast	255		3	2			250
Do	2 San Francisco bay and rivers	1,805		1,345		460		
Do	1 Southern California coast	1,300		1,000		300		
4 Oregon coast	6 Puget sound and Washington	212						212
Do	5 Columbia and Willamette rivers	8						8
Do	4 Oregon coast	28,930		27,014	960	315		641
2 San Francisco bay and rivers	5 Columbia and Willamette rivers	2,288						2,288
1 Southern California coast	do	1,192						1,192
7 Foreign	9 Alaska and Bering sea	5					5	

WILLAMETTE, OREGON (STEAMERS AND UNRIGGED CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		544,495	67,717	281,867	56,152	29,204	8,004	101,551
6 Puget sound and Washington	5 Columbia and Willamette rivers	800						800
Do	2 San Francisco bay and rivers	52,186	50,652	180				1,354
Do	7 Foreign	14,466						14,466
5 Columbia and Willamette rivers	6 Puget sound and Washington	7,381	30	525		441		6,385
Do	5 Columbia and Willamette rivers	467,230	17,035	278,735	56,152	28,763	8,004	78,541
Do	4 Oregon coast	2,427		2,427				
2 San Francisco bay and rivers	6 Puget sound and Washington	5						5

WILLAMETTE, OREGON (SAILING VESSELS).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		10,037		439		315	700	8,583
5 Columbia and Willamette rivers	5 Columbia and Willamette rivers	25						25
Do	7 Foreign	439		439				
2 San Francisco bay and rivers	do	4,030						4,030
Do	9 Alaska and Bering sea	1,340						1,340
7 Foreign	5 Columbia and Willamette rivers	1,203				315		888
Do	2 San Francisco bay and rivers	2,300						2,300
9 Alaska and Bering sea	do	700					700	

WILLAMETTE, OREGON (ALL CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		554,532	67,717	282,306	56,152	29,519	8,704	110,134
6 Puget sound and Washington	5 Columbia and Willamette rivers	800						800
Do	2 San Francisco bay and rivers	52,186	50,652	180				1,354
Do	7 Foreign	14,466						14,466
5 Columbia and Willamette rivers	6 Puget sound and Washington	7,381	30	525		441		6,385
Do	5 Columbia and Willamette rivers	467,255	17,035	278,735	56,152	28,763	8,004	78,566
Do	4 Oregon coast	2,427		2.427				
Do	7 Foreign	439		439				
2 San Francisco bay and rivers	6 Puget sound and Washington	5						5
Do	7 Foreign	4,030						4,030
Do	9 Alaska and Bering sea	1,340						1,340
7 Foreign	5 Columbia and Willamette rivers	1,203				315		888
Do	2 San Francisco bay and rivers	2,300						2,300
9 Alaska and Bering sea	do	700					700	

TRAFFIC OPERATIONS—Continued.

TABLE 9.—INTERDISTRICT MOVEMENT (FREIGHT)—Continued.

PUGET SOUND, WASHINGTON (STEAMERS AND UNRIGGED CRAFT).

INTERDISTRICT MOVEMENT.		COMMODITIES (IN TONS).						
From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		2, 315, 623	4, 187	1, 822, 720	53, 184	46, 236	5, 771	383, 525
6 Puget sound and Washington	6 Puget sound and Washington	2, 315, 119	3, 883	1, 822, 720	53, 184	46, 236	5, 771	383, 325
Do	7 Foreign	40						40
5 Columbia and Willamette rivers	5 Columbia and Willamette rivers	100						100
Do	4 Oregon coast	60						60
7 Foreign	6 Puget sound and Washington	304	304					

PUGET SOUND, WASHINGTON (SAILING VESSELS).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		326, 183	58, 153	215, 786	4, 898	8, 322	2. 080	36, 944
6 Puget sound and Washington	6 Puget sound and Washington	15, 117	119	4, 038	4, 888	4, 026	181	1, 865
Do	2 San Francisco bay and rivers	208, 759	40, 909	167, 850				
Do	1 Southern California coast	7, 833	3, 360	4, 473				
Do	7 Foreign	38, 968	2, 934	36, 034				
3 Northern California coast	2 San Francisco bay and rivers	760		760				
Do	7 Foreign	2, 400		2, 400				
2 San Francisco bay and rivers	6 Puget sound and Washington	22, 628	21		10	2, 545		20, 052
Do	7 Foreign	4, 654	728	175		1, 751		2, 000
Do	9 Alaska and Bering sea	750						750
7 Foreign	6 Puget sound and Washington	56		56				
Do	2 San Francisco bay and rivers	17, 460	4, 260				923	12, 277
Do	1 Southern California coast	5, 822	5, 822					
9 Alaska and Bering sea	6 Puget sound and Washington	8					8	
Do	2 San Francisco bay and rivers	910					910	
Do	9 Alaska and Bering sea	58					58	

PUGET SOUND, WASHINGTON (ALL CRAFT).

From—	To—	Total.	Coal.	Lumber.	Mines and quarries.	Agricultural.	Animal products including fish.	All other products.
Total		2, 641, 806	62, 340	2, 038, 506	58, 082	54, 558	7, 851	420, 469
6 Puget Sound and Washington	6 Puget sound and Washington	2, 330, 236	4, 002	1, 826, 758	58, 072	50, 262	5, 952	385. 190
Do	2 San Francisco bay and rivers	208, 759	40, 909	167, 850				
Do	1 Southern California coast	7, 833	3, 360	4, 473				
Do	7 Foreign	39, 008	2, 934	36, 034				40
5 Columbia and Willamette rivers	5 Columbia and Willamette rivers	100						100
Do	4 Oregon coast	60						60
3 Northern California coast	2 San Francisco bay and rivers	760		760				
Do	7 Foreign	2, 400		2, 400				
2 San Francisco bay and rivers	6 Puget sound and Washington	22, 628	21		10	2, 545		20, 052
Do	7 Foreign	4, 654	728	175		1, 751		2, 000
Do	9 Alaska and Bering sea	750						750
7 Foreign	6 Puget sound and Washington	360	304	56				
Do	2 San Francisco bay and rivers	17, 460	4, 260				923	12, 277
Do	1 Southern California coast	5, 822	5, 822					
9 Alaska and Bering sea	6 Puget sound and Washington	8					8	
Do	2 San Francisco bay and rivers	910					910	
Do	9 Alaska and Bering sea	58					58	

TRAFFIC OPERATIONS—Continued.

TABLE 10.—INTERDISTRICT MOVEMENT (MILEAGE)—NUMBER OF MILES COVERED IN THE TRANSPORTATION OF 8,818,363 TONS OF FREIGHT BY THE OPERATING CRAFT OF EACH CUSTOMS DISTRICT, IN THEIR MOVEMENT WITHIN OR BETWEEN CERTAIN TRAFFIC DISTRICTS. (*a*)

ALL CRAFT.

From—	To—	Miles.
Total		12, 273, 515

SAN DIEGO, CALIFORNIA (STEAMERS AND UNRIGGED CRAFT).

1 Southern California coast	1 Southern California coast	43, 867

SAN DIEGO, CALIFORNIA (SAILING VESSELS).

Total		15, 274
2 San Francisco bay and rivers	7 Foreign	3, 200
1 Southern California coast	1 Southern California coast	5, 688
Do	7 Foreign	3, 418
7 Foreign	1 Southern California coast	1, 000
Do	7 Foreign	1, 968

SAN DIEGO, CALIFORNIA (ALL CRAFT).

Total		59. 141
2 San Francisco bay and rivers	7 Foreign	3, 200
1 Southern California coast	1 Southern California coast	49, 555
Do	7 Foreign	3, 418
7 Foreign	1 Southern California coast	1, 000
Do	7 Foreign	1, 968

WILMINGTON, CALIFORNIA (STEAMERS AND UNRIGGED CRAFT).

Total		48, 752
4 Oregon coast	1 Southern California coast	17, 305
1 Southern California coast	4 Oregon coast	17, 305
Do	1 Southern California coast	14, 142

WILMINGTON, CALIFORNIA (SAILING VESSELS).

Total		26, 436
6 Puget sound and Washington	1 Southern California coast	3, 820
4 Oregon coast	do	4, 446
3 Northern California coast	do	10, 800
1 Southern California coast	do	7, 370

WILMINGTON, CALIFORNIA (ALL CRAFT).

Total		75, 188
6 Puget sound and Washington	1 Southern California coast	3, 820
4 Oregon coast	do	21, 751
3 Northern California coast	do	10, 800
1 Southern California coast	do	21, 512
Do	4 Oregon coast	17, 305

SAN FRANCISCO, CALIFORNIA (STEAMERS AND UNRIGGED CRAFT).

From—	To—	Miles.
Total		3, 207, 096
6 Puget sound and Washington	6 Puget sound and Washington	2, 234
Do	5 Columbia and Willamette rivers	3, 420
Do	3 Northern California coast	1, 208
Do	2 San Francisco bay and rivers	89, 706
Do	1 Southern California coast	4, 335
Do	9 Alaska and Bering sea	16, 744
5 Columbia and Willamette rivers	2 San Francisco bay and rivers	39, 833
Do	9 Alaska and Bering sea	24, 882
4 Oregon coast	2 San Francisco bay and rivers	49, 995
Do	1 Southern California coast	1, 542
3 Northern California coast	3 Northern California coast	10, 720
Do	2 San Francisco bay and rivers	170, 507
Do	1 Southern California coast	100, 587
Do	7 Foreign	1, 716
2 San Francisco bay and rivers	6 Puget sound and Washington	89, 707
Do	4 Oregon coast	49, 995
Do	3 Northern California coast	170, 508
Do	2 San Francisco bay and rivers	1, 637, 420
Do	1 Southern California coast	131, 013
Do	7 Foreign	111, 267
Do	8 Atlantic ports	13, 250
Do	9 Alaska and Bering sea	73, 762
1 Southern California coast	2 San Francisco bay and rivers	131, 013
Do	1 Southern California coast	2, 255
Do	7 Foreign	16, 696
7 Foreign	6 Puget sound and Washington	23, 658
Do	5 Columbia and Willamette rivers	25, 480
Do	2 San Francisco bay and rivers	111, 268
Do	1 Southern California coast	16, 696
Do	9 Alaska and Bering sea	4, 400
9 Alaska and Bering sea	2 San Francisco bay and rivers	73, 763
Do	9 Alaska and Bering sea	7, 516

SAN FRANCISCO, CALIFORNIA (SAILING VESSELS).

Total		4, 772, 113
6 Puget sound and Washington	6 Puget sound and Washington	724
Do	5 Columbia and Willamette rivers	1, 020
Do	3 Northern California coast	1, 422
Do	2 San Francisco bay and rivers	310, 222
Do	1 Southern California coast	59, 370
Do	7 Foreign	228, 285
Do	9 Alaska and Bering sea	8, 715
5 Columbia and Willamette rivers	5 Columbia and Willamette rivers	298
Do	3 Northern California coast	1, 094
Do	2 San Francisco bay and rivers	34, 207
Do	1 Southern California coast	12, 262
Do	7 Foreign	18, 282
Do	9 Alaska and Bering sea	1, 018
4 Oregon coast	2 San Francisco bay and rivers	99, 648
Do	1 Southern California coast	27. 646
Do	7 Foreign	9, 185
3 Northern California coast	6 Puget sound and Washington	1, 422
Do	5 Columbia and Willamette rivers	1, 095
Do	2 San Francisco bay and rivers	152, 521
Do	1 Southern California coast	88, 262
Do	7 Foreign	41, 896
2 San Francisco bay and rivers	6 Puget sound and Washington	310, 222
Do	5 Columbia and Willamette rivers	34, 208
Do	4 Oregon coast	99. 649
Do	3 Northern California coast	152. 521
Do	2 San Francisco bay and rivers	889, 469
Do	1 Southern California coast	3, 472
Do	7 Foreign	625, 692
Do	9 Alaska and Bering sea	154, 968
1 Southern California coast	6 Puget sound and Washington	59, 370
Do	5 Columbia and Willamette rivers	12, 262
Do	2 San Francisco bay and rivers	3. 472
Do	1 Southern California coast	2. 460
Do	7 Foreign	42, 260
Do	9 Alaska and Bering sea	2, 400
7 Foreign	6 Puget sound and Washington	228, 286
Do	2 San Francisco bay and rivers	625, 692
Do	1 Southern California coast	42, 260
Do	7 Foreign	166, 363
Do	8 Atlantic ports	16, 155
Do	9 Alaska and Bering sea	2, 750
8 Atlantic ports	2 San Francisco bay and rivers	17, 000
Do	7 Foreign	16, 155
9 Alaska and Bering sea	6 Puget sound and Washington	8, 715
Do	2 San Francisco bay and rivers	154, 968
Do	7 Foreign	2, 750

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a See page 7 and Table 9.

TRAFFIC OPERATIONS—Continued.

TABLE **10.**—INTERDISTRICT MOVEMENT (MILEAGE)—Continued.

SAN FRANCISCO, CALIFORNIA (ALL CRAFT).

From—	To—	Miles.
Total		7, 979, 209
6 Puget sound and Washington	6 Puget sound and Washington	2, 958
Do	5 Columbia and Willamette rivers	4, 440
Do	3 Northern California coast	2, 630
Do	2 San Francisco bay and rivers	399, 928
Do	1 Southern California coast	63, 705
Do	7 Foreign	228, 285
Do	9 Alaska and Bering sea	25, 459
5 Columbia and Willamette rivers	5 Columbia and Willamette rivers	298
Do	3 Northern California coast	1, 094
Do	2 San Francisco bay and rivers	74, 040
Do	1 Southern California coast	12, 262
Do	7 Foreign	18, 282
Do	9 Alaska and Bering sea	25. 900
4 Oregon coast	2 San Francisco bay and rivers	149, 643
Do	1 Southern California coast	29, 188
Do	7 Foreign	9, 185
3 Northern California coast	6 Puget sound and Washington	1, 422
Do	5 Columbia and Willamette rivers	1, 095
Do	3 Northern California coast	10, 720
Do	2 San Francisco bay and rivers	323, 028
Do	1 Southern California coast	188, 849
Do	7 Foreign	43, 612
2 San Francisco bay and rivers	6 Puget sound and Washington	399, 929
Do	5 Columbia and Willamette rivers	34, 208
Do	4 Oregon coast	149, 644
Do	3 Northern California coast	323, 029
Do	2 San Francisco bay and rivers	2, 526, 889
Do	1 Southern California coast	134, 485
Do	7 Foreign	736, 959
Do	8 Atlantic ports	13, 250
Do	9 Alaska and Bering sea	228, 730
6 Southern California coast	6 Puget sound and Washington	59, 370
Do	5 Columbia and Willamette rivers	12, 262
Do	2 San Francisco bay and rivers	134, 485
Do	1 Southern California coast	4, 715
Do	7 Foreign	58, 956
Do	9 Alaska and Bering sea	2, 400
7 Foreign	6 Puget sound and Washington	251, 944
Do	5 Columbia and Willamette rivers	25, 480
Do	2 San Francisco bay and rivers	736, 960
Do	1 Southern California coast	58, 956
Do	7 Foreign	166, 363
Do	8 Atlantic ports	16, 155
Do	9 Alaska and Bering sea	7, 150
8 Atlantic ports	2 San Francisco bay and rivers	17, 000
Do	7 Foreign	16, 155
9 Alaska and Bering sea	6 Puget sound and Washington	8. 715
Do	2 San Francisco bay and rivers	228, 731
Do	7 Foreign	2, 750
Do	9 Alaska and Bering sea	7, 516

HUMBOLDT, CALIFORNIA (STEAMERS AND UNRIGGED CRAFT).

3 Northern California coast	3 Northern California coast	23, 407

HUMBOLDT, CALIFORNIA (SAILING VESSELS).

Total		102, 663
6 Puget sound and Washington	2 San Francisco bay and rivers	4, 600
Do	1 Southern California coast	2, 458
5 Columbia and Willamette rivers	2 San Francisco bay and rivers	555
Do	1 Southern California coast	1, 015
4 Oregon coast	2 San Francisco bay and rivers	3, 030
3 Northern California coast	6 Puget sound and Washington	560
Do	5 Columbia and Willamette rivers	985
Do	3 Northern California coast	7, 830
Do	2 San Francisco bay and rivers	5, 337
Do	1 Southern California coast	11, 925
Do	7 Foreign	19, 228
2 San Francisco bay and rivers	6 Puget sound and Washington	4, 600
Do	5 Columbia and Willamette rivers	555
Do	3 Northern California coast	5, 337
Do	7 Foreign	17, 045
7 Foreign	2 San Francisco bay and rivers	17, 045
Do	7 Foreign	558

HUMBOLDT, CALIFORNIA (ALL CRAFT).

From—	To—	Miles.
Total		126, 070
6 Puget sound and Washington	2 San Francisco bay and rivers	4, 600
Do	1 Southern California coast	2, 458
5 Columbia and Willamette rivers	2 San Francisco bay and rivers	555
Do	1 Southern California coast	1, 015
4 Oregon coast	2 San Francisco bay and rivers	3, 030
3 Northern California coast	6 Puget sound and Washington	560
Do	5 Columbia and Willamette rivers	985
Do	3 Northern California coast	31, 237
Do	2 San Francisco bay and rivers	5, 337
Do	1 Southern California coast	11, 925
Do	7 Foreign	19, 228
2 San Francisco bay and rivers	6 Puget sound and Washington	4, 600
Do	5 Columbia and Willamette rivers	555
Do	3 Northern California coast	5, 337
Do	7 Foreign	17, 045
7 Foreign	2 San Francisco bay and rivers	17, 045
Do	7 Foreign	558

SOUTHERN DISTRICT OREGON, OREGON (STEAMERS AND UNRIGGED CRAFT).

4 Oregon coast	4 Oregon coast	98. 222

SOUTHERN OREGON, OREGON (SAILING VESSELS).

Total		8, 920
4 Oregon coast	2 San Francisco bay and rivers	3, 660
Do	1 Southern California coast	1, 600
2 San Francisco bay and rivers	4 Oregon coast	3, 660

SOUTHERN OREGON, OREGON (ALL CRAFT).

Total		107, 142
4 Oregon coast	4 Oregon coast	98, 222
Do	2 San Francisco bay and rivers	3, 660
Do	1 Southern California coast	1, 600
2 San Francisco bay and rivers	4 Oregon coast	3, 660

YAQUINA, OREGON (STEAMERS AND UNRIGGED CRAFT).

Total		68, 158
5 Columbia and Willamette rivers	4 Oregon coast	4, 362
4 Oregon coast	5 Columbia and Willamette rivers	4, 362
Do	4 Oregon coast	27, 514
Do	2 San Francisco bay and rivers	15, 960
2 San Francisco bay and rivers	4 Oregon coast	15, 960

OREGON, OREGON (STEAMERS AND UNRIGGED CRAFT).

Total		276, 076
6 Puget sound and Washington	6 Puget sound and Washington	79, 981
Do	5 Columbia and Willamette rivers	3, 675
Do	4 Oregon coast	9, 048
5 Columbia and Willamette rivers	6 Puget sound and Washington	3, 675
Do	5 Columbia and Willamette rivers	133, 271
Do	4 Oregon coast	6, 240
Do	2 San Francisco bay and rivers	4, 170
Do	1 Southern California coast	7, 370
4 Oregon coast	6 Puget sound and Washington	9, 048
Do	4 Oregon coast	7, 458
2 San Francisco bay and rivers	5 Columbia and Willamette rivers	4, 170
Southern California coast	do	7, 370
9 Alaska and Bering sea	9 Alaska and Bering sea	600

TRAFFIC OPERATIONS—Continued.

TABLE **10.**—INTERDISTRICT MOVEMENT (MILEAGE)—Continued.

OREGON, OREGON (SAILING VESSELS).

From—	To—	Miles.
Total		19, 742
6 Puget sound and Washington	6 Puget sound and Washington	8, 350
5 Columbia and Willamette rivers	5 Columbia and Willamette rivers	8, 892
Do	4 Oregon coast	60
Oregon coast	5 Columbia and Willamette rivers	60
Do	4 Oregon coast	180
7 Foreign	9 Alaska and Bering sea	2, 200

OREGON, OREGON (ALL CRAFT).

From—	To—	Miles.
Total		295, 818
6 Puget sound and Washington	6 Puget sound and Washington	88, 331
Do	5 Columbia and Willamette rivers	3, 675
Do	4 Oregon coast	9, 048
5 Columbia and Willamette rivers	6 Puget sound and Washington	3, 675
Do	5 Columbia and Willamette rivers	142, 163
Do	4 Oregon coast	6, 300
Do	2 San Francisco bay and rivers	4, 170
Do	1 Southern California coast	7, 370
4 Oregon coast	6 Puget sound and Washington	9, 048
Do	5 Columbia and Willamette rivers	60
Do	4 Oregon coast	7, 638
2 San Francisco bay and rivers	5 Columbia and Willamette rivers	4, 170
1 Southern California coast	do	7, 370
7 Foreign	9 Alaska and Bering sea	2, 200
9 Alaska and Bering sea	do	600

WILLAMETTE, OREGON (STEAMERS AND UNRIGGED CRAFT).

From—	To—	Miles.
Total		1, 346, 979
6 Puget sound and Washington	6 Puget sound and Washington	53, 783
Do	5 Columbia and Willamette rivers	18, 624
Do	2 San Francisco bay and rivers	34, 608
Do	7 Foreign	113, 853
5 Columbia and Willamette rivers	6 Puget sound and Washington	18, 624
Do	5 Columbia and Willamette rivers	990, 019
Do	4 Oregon coast	5, 720
Do	2 San Francisco bay and rivers	77, 140
2 San Francisco bay and rivers	6 Puget sound and Washington	34, 608

WILLAMETTE, OREGON (SAILING VESSELS).

From—	To—	Miles.
Total		30, 400
6 Puget sound and Washington	1 Southern California coast	1, 215
5 Columbia and Willamette rivers	5 Columbia and Willamette rivers	1, 200
Do	7 Foreign	5, 392
2 San Francisco bay and rivers	do	5, 500
Do	9 Alaska and Bering sea	3, 100
7 Foreign	5 Columbia and Willamette rivers	5, 393
Do	2 San Francisco bay and rivers	5, 500
9 Alaska and Bering sea	do	3, 100

WILLAMETTE, OREGON (ALL CRAFT).

From—	To—	Miles.
Total		1, 377, 379
6 Puget sound and Washington	6 Puget sound and Washington	53, 783
Do	5 Columbia and Willamette rivers	18, 624
Do	2 San Francisco bay and rivers	34, 608
Do	1 Southern California coast	1, 215
Do	7 Foreign	113, 853
5 Columbia and Willamette rivers	6 Puget sound and Washington	18, 624
Do	5 Columbia and Willamette rivers	991, 219
Do	4 Oregon coast	5. 720
Do	2 San Francisco bay and rivers	77, 140
Do	7 Foreign	5, 500
2 San Francisco bay and rivers	6 Puget sound and Washington	34, 608
Do	7 Foreign	5, 392
Do	9 Alaska and Bering sea	3, 100
7 Foreign	5 Columbia and Willamette rivers	5, 393
Do	2 San Francisco bay and rivers	5, 500
9 Alaska and Bering sea	do	3, 100

PUGET SOUND, WASHINGTON (STEAMERS AND UNRIGGED CRAFT).

From—	To—	Miles.
Total		1, 653, 603
6 Puget sound and Washington	6 Puget sound and Washington	1, 577, 873
Do	7 Foreign	838
5 Columbia and Willamette rivers	5 Columbia and Willamette rivers	73, 714
Do	4 Oregon coast	340
7 Foreign	6 Puget sound and Washington	838

PUGET SOUND, WASHINGTON (SAILING VESSELS).

From—	To—	Miles.
Total		531, 807
6 Puget sound and Washington	6 Puget sound and Washington	24, 845
Do	2 San Francisco bay and rivers	124, 105
Do	1 Southern California coast	16, 092
Do	7 Foreign	75, 329
3 Northern California coast	2 San Francisco bay and rivers	432
Do	7 Foreign	11, 733
2 San Francisco bay and rivers	6 Puget sound and Washington	124, 105
Do	7 Foreign	23, 000
Do	9 Alaska and Bering sea	3, 000
7 Foreign	6 Puget sound and Washington	75, 329
Do	2 San Francisco bay and rivers	23, 000
Do	1 Southern California coast	22, 255
Do	9 Alaska and Bering sea	1, 082
9 Alaska and Bering sea	6 Puget sound and Washington	2, 000
Do	2 San Francisco bay and rivers	3, 000
Do	9 Alaska and Bering sea	2, 500

PUGET SOUND, WASHINGTON (ALL CRAFT).

From—	To—	Miles.
Total		2, 185, 410
6 Puget sound and Washington	6 Puget sound and Washington	1, 602, 718
Do	2 San Francisco bay and rivers	124, 105
Do	1 Southern California coast	16, 092
Do	7 Foreign	76, 167
5 Columbia and Willamette rivers	5 Columbia and Willamette rivers	73, 714
Do	4 Oregon coast	340
3 Northern California coast	2 San Francisco bay and rivers	432
Do	7 Foreign	11, 733
2 San Francisco bay and rivers	6 Puget sound and Washington	124, 105
Do	7 Foreign	23, 000
Do	9 Alaska and Bering sea	3, 000
7 Foreign	6 Puget sound and Washington	76, 167
Do	2 San Francisco bay and rivers	23, 000
Do	1 Southern California coast	22, 255
Do	9 Alaska and Bering sea	1, 082
9 Alaska and Bering sea	6 Puget sound and Washington	2, 000
Do	2 San Francisco bay and rivers	3, 000
Do	9 Alaska and Bering sea	2, 500

EARNINGS AND EXPENSES.

TABLE 11.—FINANCIAL ACCOUNT IN GENERAL—GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF ALL OPERATING CRAFT OVER FIVE TONS ON THE PACIFIC COAST IN 1889.

CUSTOMS DISTRICTS.	TOTAL ALL CRAFT.			STEAMERS AND UNRIGGED CRAFT.			SAILING VESSELS.		
	Gross earnings.	Expenses.	Net earnings.	Gross earnings.	Expenses.	Net earnings.	Gross earnings.	Expenses.	Net earnings.
Total	$20, 628, 316. 28	$17, 274, 809. 30	$3, 353, 506. 98	$13, 237, 222. 29	$11, 446, 692. 77	$1, 790, 529. 52	$7, 391, 093. 99	$5, 828, 116. 53	$1, 562, 977. 46
California	14, 548, 861. 36	12, 018, 431. 83	2. 530, 429. 53	8, 224, 496. 76	7, 069, 208. 94	1, 155, 287. 82	6, 324, 364. 60	4, 949, 222. 89	1, 375, 141. 71
San Diego	62, 707. 47	60, 442. 84	2, 264. 63	42, 507. 47	45, 985. 04	*a*3, 477. 57	20, 200. 00	14, 457. 80	5, 742. 20
Wilmington	91, 689. 68	89, 509. 73	2, 179. 95	64, 406. 14	63, 576. 84	829. 30	27, 283. 54	25, 932. 89	1, 350. 65
San Francisco	14, 191, 341. 93	11, 701, 926. 71	2, 489, 415. 22	8. 015, 094. 94	6, 872, 414. 76	1, 142, 680. 18	6, 176, 246. 99	4, 829, 511. 95	1, 346; 735. 04
Humboldt	203, 122. 28	166, 552. 55	36, 569. 73	102, 488. 21	87, 232. 30	15, 255. 91	100, 634. 07	79, 320. 25	21, 313. 82
Oregon	3, 864, 723. 69	3, 453, 508. 85	411, 214. 84	3. 771, 609. 33	3, 388, 591. 33	383, 018. 00	93, 114. 36	64, 917. 52	28, 196. 84
Southern Oregon	62, 886. 33	48, 341. 36	14, 544. 97	56, 499. 33	42, 405. 36	14, 093. 97	6, 387. 00	5, 936. 00	451. 00
Yaquina	119, 227. 63	128, 260. 54	*a*9, 032. 91	119, 227. 63	128, 260. 54	*a*9, 032. 91	....	....	....
Oregon	243, 410. 16	188, 686. 63	54, 723. 53	212, 478. 11	167, 249. 00	45, 229. 11	30, 932. 05	21, 437. 63	9, 494. 42
Willamette	3, 439, 199. 57	3, 088, 220. 32	350, 979. 25	3, 383, 404. 26	3, 050, 676. 43	332, 727. 83	55, 795. 31	37, 543. 89	18, 251. 42
Washington—Puget sound	2, 214. 731. 23	1. 802. 868. 62	411. 862. 61	1, 241, 116. 20	988, 892. 50	252, 223. 70	973, 615. 03	813, 976. 12	159, 638. 91

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EARNINGS AND EXPENSES—Continued.

TABLE 12.—ITEMIZED EXPENSE ACCOUNT OF ALL VESSELS REPORTING AND ENGAGED IN THE TRANSPORTATION OF PASSENGERS AND FREIGHT ON THE PACIFIC COAST, SUBDIVIDED INTO THE VARIOUS ITEMS CONSTITUTING RUNNING AND SHORE EXPENSES.

STEAMERS AND SAILING VESSELS, EXCLUSIVE OF FERRYBOATS.

CUSTOMS DISTRICTS.	Number of vessels.	RUNNING EXPENSES.						
		Total.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel for the steamers.	Other.
Total	1, 001	$13, 226, 080. 53	$292, 085. 09	$5, 212, 039. 20	$1, 507, 183. 73	$1, 098, 232. 29	$2, 094, 523. 42	$3, 021, 416. 80
California	724	8, 783, 424. 68	179, 435. 86	3, 670, 038. 30	1, 095, 267. 48	808, 728. 93	1, 496, 655. 60	1, 533, 298. 51
San Diego	7	9, 035. 85	7. 00	4, 143. 73	1, 500. 00	1, 572. 80	....	1, 812. 32
Wilmington	13	79, 172. 08	1, 531. 80	39, 027. 45	11, 473. 08	5, 047. 88	15, 107. 90	6, 983. 97
San Francisco	685	8, 578, 287. 25	172, 354. 53	3, 559, 877. 97	1, 070, 483. 31	793, 962. 80	1, 477, 547. 70	1, 504, 060. 94
Humboldt	19	116, 929. 50	5, 542. 53	66, 989. 15	11, 811. 09	8, 145. 45	4, 000. 00	20, 441. 28
Oregon	132	2, 992, 026. 41	74, 898. 01	859, 531. 59	196, 108. 54	184, 579. 53	419, 920. 30	1, 256, 988. 44
Southern Oregon	13	41, 868. 05	103. 50	29, 484. 00	2, 910. 00	3, 602. 55	4, 820. 80	947. 20
Yaquina	7	95, 958. 43	1, 368. 80	36, 153. 31	9, 330. 44	5, 854. 63	22, 703. 00	20, 548. 25
Oregon	47	162, 175. 41	1, 650. 00	99, 316. 12	14, 667. 15	11, 576. 61	29, 320. 00	5, 645. 53
Willamette	65	2, 692, 024. 52	71, 775. 71	694, 578. 16	169, 200. 95	163, 545. 74	363, 076. 50	1, 229, 847. 46
Washington—Puget sound	145	1, 450, 629. 44	37, 751. 22	683, 069. 31	215, 807. 71	104, 923. 83	177, 947. 52	231, 129. 85

CUSTOMS DISTRICTS.	SHORE EXPENSES.					
	Total.	Commissions.	Insurance.	Taxes.	Office expenses.	Other.
Total	$1, 672, 060. 79	$175, 080. 30	$542, 938. 01	$125, 655. 76	$210, 130. 26	$618, 256. 46
California	1, 185, 713. 91	133, 206. 84	422, 993. 73	93, 389 87	173, 002. 66	363, 120. 81
San Diego	516. 25	....	270. 00	21. 25	....	225. 00
Wilmington	5, 436. 50	....	3, 700. 00	613. 25	....	1, 123. 25
San Francisco	1, 170, 691. 72	132, 331. 12	418, 507. 00	91, 392. 77	173, 002. 66	355, 458. 17
Humboldt	9 069 44	875. 72	516. 73	1, 362. 60	....	6, 314. 39
Oregon	295, 866. 34	20, 920. 40	54, 131. 70	18, 195. 61	27, 543. 94	175, 074. 69
Southern Oregon	754. 50	....	150. 00	424. 50	180. 00	....
Yaquina	3, 436. 42	....	450. 00	1, 033. 18	....	1, 953. 24
Oregon	3, 650. 91	110. 00	1, 985. 70	870. 21	450. 00	235. 00
Willamette	288, 024 51	20, 810. 40	51, 546. 00	15, 867. 72	26, 913. 94	172, 886. 45
Washington—Puget sound	190, 480. 54	20, 953. 06	65, 812. 58	14. 070. 28	9, 583. 66	80, 060. 96

STEAMERS.

CUSTOMS DISTRICTS.	Number of vessels.	RUNNING EXPENSES.						
		Total.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel for the steamers.	Other.
Total	354	$8, 460, 400. 63	$135, 921. 09	$2, 924, 205. 19	$832, 191. 57	$613, 703. 33	$2, 094, 523. 42	$1, 859, 856. 03
California	147	4, 726, 952. 38	55, 737. 81	1, 703, 263. 70	516, 875. 06	380, 400. 08	1, 496, 655. 60	574, 020. 13
Wilmington	5	55, 903. 74	222. 25	25, 826. 45	8, 169. 77	2, 152. 13	15, 107. 90	4, 425. 24
San Francisco	136	4, 629, 573. 76	55, 035. 56	1, 655, 683. 25	508, 705. 29	375, 725. 58	1, 477, 547. 70	556, 876. 38
Humboldt	6	41, 474. 88	480. 00	21, 754. 00	....	2, 522. 37	4, 000. 00	12, 718 51
Oregon	114	2, 939, 381. 60	73, 352. 52	832, 502. 84	188, 345. 15	182, 709. 82	419, 920. 30	1, 242, 550. 97
Southern Oregon	12	36, 118. 05	....	25, 984. 00	1, 830. 00	2, 802. 55	4, 820. 80	680. 70
Yaquina	7	95, 958. 43	1, 368. 80	36, 153. 31	9, 330. 44	5, 854. 63	22, 703. 00	20, 548. 25
Oregon	33	150, 964. 89	1, 650. 00	88, 927. 37	13, 917. 15	11, 576. 61	29, 320. 00	5, 573. 76
Willamette	62	2, 656, 340. 23	70, 333. 72	681, 438. 16	163, 267. 56	162, 476. 03	363, 076. 50	1, 215, 748. 26
Washington—Puget sound	93	794, 066. 65	6, 830. 76	388, 438. 65	126, 971. 36	50, 593. 43	177, 947. 52	43, 284. 93

EARNINGS AND EXPENSES—Continued.

TABLE 12.—ITEMIZED EXPENSE ACCOUNT—Continued.

STEAMERS—Continued.

CUSTOMS DISTRICTS.	SHORE EXPENSES.					
	Total.	Commissions,	Insurance.	Taxes.	Office expenses.	Other.
Total	$1, 035, 370. 82	$75, 819. 03	$384, 795. 87	$72, 799. 12	$210, 130. 26	$291, 826. 54
California	675, 842. 96	50, 935. 52	309, 627. 00	49, 396. 93	173, 002. 66	92, 880. 85
Wilmington	4, 521. 95	....	3, 700. 00	435. 00	....	386. 95
San Francisco	666, 117. 20	50, 935. 52	305, 702. 00	48, 745. 33	173, 002. 66	87, 731. 69
Humboldt	5, 203. 81	....	225. 00	216. 60	....	4, 762. 21
Oregon	293, 727. 74	20, 520. 40	52, 931. 70	17, 682. 01	27, 543. 94	175, 049. 69
Southern Oregon	568. 50	....	....	388. 50	180. 00	....
Yaquina	3, 436. 42	....	450. 00	1, 033. 18	....	1, 953. 24
Oregon	3, 557. 91	110. 00	1, 985. 70	802. 21	450. 00	210. 00
Willamette	286, 164. 91	20, 410. 40	50, 496. 00	15, 458. 12	26, 913. 94	172, 886. 45
Washington—Puget sound	65, 800. 12	4, 363. 11	22, 237. 17	5, 720. 18	9, 583. 66	23, 896. 00

SAILING VESSELS.

CUSTOMS DISTRICTS.	Number of vessels.	RUNNING EXPENSES.						
		Total.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel for the steamers.	Other.
Total	647	$4, 765, 679. 90	$156, 164. 00	$2, 288, 434. 01	$674, 992. 16	$484, 528. 96	....	$1, 161, 560. 77
California	577	4, 056, 472. 30	123, 698. 05	1, 966, 774. 60	578, 392. 42	428, 328. 85	....	959, 278. 38
San Diego	7	9, 035. 85	7. 00	4, 143. 73	1, 500. 00	1, 572. 80	....	1, 812. 32
Wilmington	8	23, 268. 34	1, 309. 55	13, 201. 00	3, 303. 31	2, 895. 75	....	2, 558. [illegible]
San Francisco	549	3, 948, 713. 49	117, 318. 97	1, 904, 194. 72	561, 778. 02	418, 237. 22	....	947, 184. 5[illegible]
Humboldt	13	75, 454. 62	5, 062. 53	45, 235. 15	11, 811. 09	5, 623. 08	....	7, 722. [illegible]
Oregon	18	52, 644. 81	1, 545. 49	27, 028. 75	7. 763. 39	1, 869. 71	....	14, 437. 47
Southern Oregon	1	5, 750. 00	103. 50	3, 500. 00	1, 080. 00	800. 00	....	266. 50
Oregon	14	11, 210. 52	....	10, 388. 75	750. 00	....	....	71. 77
Willamette	3	35, 684. 29	1, 441. 99	13, 140. 00	5, 933. 39	1, 069. 71	....	14, 099. 2[illegible]
Washington—Puget sound	52	656, 562. 79	30, 920. 46	294, 630. 66	88, 836. 35	54, 330. 40	....	187, 844. 92

CUSTOMS DISTRICTS.	SHORE EXPENSES.					
	Total.	Commissions.	Insurance.	Taxes.	Office expenses.	Other.
Total	$636, 689. 97	$99, 261. 27	$158, 142. 14	$52, 856. 64	....	$326, 429. 92
California	509, 870. 95	82, 271. 32	113, 366. 73	43, 992. 94	....	270, 239. 96
San Diego	516. 25	....	270. 00	21. 25	....	225. 00
Wilmington	914. 55	....	....	178. 25	....	736. 30
San Francisco	504, 574. 52	81, 395. 60	112, 805. 00	42, 647. 44	....	267, 726. 48
Humboldt	3, 865. 63	875. 72	291. 73	1, 146. 00	....	1, 552. 18
Oregon	2, 138. 60	400. 00	1, 200. 00	513. 60	....	25. 00
Southern Oregon	186. 00	....	150. 00	36. 00	....	....
Oregon	93. 00	....	....	68. 00	....	25. 00
Willamette	1, 859. 60	400. 00	1, 050. 00	409. 60	....	....
Washington—Puget sound	124, 680. 42	16, 589. 95	43, 575. 41	8, 350. 10	....	56, 164. 96

EARNINGS AND EXPENSES—Continued.

Table 13.—EMPLOYÉS AND WAGES IN DETAIL—MONTHLY WAGES PAID IN EACH DISTRICT TO ALL GRADES OF EMPLOYÉS ON VESSELS ENGAGED IN THE TRANSPORTATION OF PASSENGERS AND FREIGHT ON THE PACIFIC COAST IN 1889, EXCLUSIVE OF FERRYBOATS.

STEAMERS AND SAILING VESSELS.

CUSTOMS DISTRICTS.	Number of vessels.	TOTAL.		CAPTAINS.		FIRST MATES.		SECOND MATES, THIRD MATES, AND BOATSWAINS.		CLERKS AND PURSERS.		SURGEONS.	
		Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	1,001	10,396	$521,502.86	1,001	$95,175.97	685	$39,573.77	432	$20,756.16	189	$12,652.50	2	$110.00
Total steam	354	5,825	311,545.22	354	41,271.46	286	18,783.87	138	7,556.16	188	12,552.50	2	110.00
Total sail	647	4,571	209,957.64	647	53,904.51	399	20,789.90	294	13,200.00	1	100.00		

CUSTOMS DISTRICTS.	FIRST ENGINEERS.		SECOND ENGINEERS AND THIRD ENGINEERS.		FIREMEN AND COAL PASSERS.		WHEELMEN AND PILOTS.		LOOKOUTS.		WATCHMEN.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	353	$35,798.54	251	$18,650.00	657	$29,847.26	134	$9,509.17	24	$1,039.50	160	$6,702.73
Total steam	353	35,798.54	251	18,650.00	657	29,847.26	128	9,204.17	19	844.50	153	6,407.73
Total sail							6	305.00	5	195.00	7	295.00

CUSTOMS DISTRICTS.	COOKS AND BAKERS.		COOKS' ASSISTANTS, PANTRYMEN, AND BUTCHERS.		SEAMEN.		DECK HANDS AND PORTERS.		OILERS AND WATER TENDERS.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	726	$35,339.45	393	$10,952.28	3,331	$127,817.33	939	$38,344.25	172	$8,053.37
Total steam	296	14,544.45	267	8,372.28	800	35,090.10	939	38,344.25	172	8,053.37
Total sail	430	20,795.00	126	2,580.00	2,531	92,727.23				

CUSTOMS DISTRICTS.	STEWARDS AND STOREKEEPERS.		WAITERS.		BOYS.		CHAMBERMAIDS AND STEWARDESSES.		CARPENTERS.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	192	$9,440.00	455	$11,612.58	163	$3,858.00	18	$445.00	119	$5,825.00
Total steam	177	8,870.00	455	11,612.58	140	3,517.00	18	445.00	32	1,670.00
Total sail	15	570.00			23	341.00			87	4,155.00

EARNINGS AND EXPENSES—Continued.

TABLE 13.—EMPLOYÉS AND WAGES IN DETAIL—Continued.

STEAMERS.

CUSTOMS DISTRICTS.	Number of vessels.	TOTAL.		CAPTAINS.		FIRST MATES.		SECOND MATES, THIRD MATES, AND BOATSWAINS.		CLERKS AND PURSERS.		SURGEONS.	
		Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	354	5, 825	$311, 545. 22	354	$41, 271. 46	286	$18, 783. 87	138	$7, 556. 16	188	$12, 552. 50	2	$110. 00
Total for California	147	3, 342	182, 278. 16	147	19, 756. 30	128	9, 684. 37	108	6, 025. 00	89	6, 421. 50	2	110. 00
Total for Oregon	114	1, 738	87, 698. 21	114	12, 288. 50	84	5, 062. 00	27	1, 431. 16	66	4, 166. 00	......	......
Total for Washington	93	745	41, 568. 85	93	9, 226. 66	74	4, 037. 50	3	100. 00	33	1, 965. 00	......	......
California	147	3, 342	182, 278. 16	147	19, 756. 30	128	9, 684. 37	108	6, 025. 00	89	6, 421. 50	2	110. 00
Wilmington	5	49	3, 060. 20	5	600. 30	3	191. 87	2	105. 00	1	54. 00	......	......
San Francisco	136	3, 270	177, 925. 96	136	18, 710. 00	123	9, 417. 50	106	5, 920. 00	88	6, 367. 50		110. 00
Humboldt	6	23	1, 292. 00	6	446. 00	2	75. 00	......	......	......	......	......	......
Oregon	114	1, 738	87, 698. 21	114	12, 288. 50	84	5, 062. 00	27	1. 431. 16	66	4, 166. 00	......	......
Southern Oregon	12	42	2, 717. 00	12	980. 00	2	90. 00	......	......	1	100. 00	......	......
Yaquina	7	60	3, 250. 00	7	615. 00	3	190. 00	1	60. 00	1	75. 00	......	......
Oregon	33	168	10, 168. 82	33	2, 892. 50	20	1, 030. 00	5	241. 66	5	335. 00	......	......
Willamette	62	1, 468	71, 562. 39	62	7, 801. 00	59	3, 752. 00	21	1, 129. 50	59	3, 656. 00	......	......
Washington—Puget sound	93	745	41, 568. 85	93	9, 226. 66	74	4, 037. 50	3	100. 00	33	1, 965. 00	......	......

CUSTOMS DISTRICTS.	FIRST ENGINEERS.		SECOND ENGINEERS AND THIRD ENGINEERS.		FIREMEN AND COAL PASSERS.		WHEELMEN AND PILOTS.		LOOKOUTS.		WATCHMEN.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	353	$35, 798. 54	251	$18, 650. 00	657	$29, 847. 26	128	$9, 204. 17	19	$844. 50	153	$6, 407. 73
Total for California	146	16, 338. 22	155	12, 462. 50	395	18, 589. 46	91	7, 054. 17	13	544. 50	73	3, 147. 73
Total for Oregon	114	11, 390. 16	65	4, 322. 50	191	8, 262. 62	33	1, 900. 00	6	300. 00	57	2, 320. 00
Total for Washington	93	8, 070. 16	31	1, 865. 00	71	2, 995. 18	4	250. 00	......	......	23	940. 00
California	146	16, 338. 22	155	12, 462. 50	395	18, 589. 46	91	7, 054. 17	13	544. 50	73	3, 147. 73
Wilmington	5	546. 72	1	90. 00	4	156. 09	1	45. 00	......	......	2	122. 73
San Francisco	135	15, 365. 50	152	12, 292. 50	391	18, 433. 37	90	7, 009. 17	13	544. 50	71	3, 025. 00
Humboldt	6	426. 00	2	80. 00	......	......	......	......	......	......	......	......
Oregon	114	11, 390. 16	65	4, 322. 50	191	8, 262. 62	33	1, 900. 00	6	300. 00	57	2, 320. 00
Southern Oregon	12	925. 00	2	105. 00	1	50. 00	......	......	......	......	1	40. 00
Yaquina	7	505. 00	3	210. 00	7	310. 00	2	90. 00	......	......	......	......
Oregon	33	2, 679. 16	6	342. 50	6	272. 50	......	......	......	......	3	120. 00
Willamette	62	7, 281. 00	54	3, 665. 00	177	7, 630. 12	31	1, 810. 00	6	300. 00	53	2, 160. 00
Washington—Puget sound	93	8, 070. 16	31	1, 865. 00	71	2, 995. 18	4	250. 00	......	......	23	940. 00

EARNINGS AND EXPENSES—Continued.

TABLE 13.—EMPLOYÉS AND WAGES IN DETAIL—Continued.

STEAMERS—Continued.

CUSTOMS DISTRICTS.	COOKS AND BAKERS.		COOKS' ASSISTANTS, PANTRYMEN, AND BUTCHERS.		SEAMEN.		DECK HANDS AND PORTERS.		OILERS AND WATER TENDERS.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	296	$14,544.45	267	$8,372.28	800	$35,090.10	939	$38,344.25	172	$8,053.37
Total for California	141	7,786.78	162	5,194.78	659	29,250.00	458	19,202.40	123	5,863.37
Total for Oregon	84	3,660.17	84	2,650.00	124	5,205.00	329	13,257.60	48	2,150.00
Total for Washington	71	3,097.50	21	527.50	17	635.10	152	5,884.25	1	40.00
California	141	7,786.78	162	5,194.78	659	29,250.00	458	19,202.40	123	5,863.37
Wilmington	4	212.78	1	34.86	4	180.00	6	267.40	4	203.37
San Francisco	137	7,574.00	161	5,159.92	655	29,070.00	447	18,755.00	117	5,575.00
Humboldt	....	....	....	....	....	....	5	180.00	2	85.00
Oregon	84	3,660.17	84	2,650.00	124	5,205.00	329	13,257.60	48	2,150.00
Southern Oregon	1	26.00	....	....	....	....	10	401.00	....	....
Yaquina	4	170.00	5	215.00	6	270.00	3	130.00	3	135.00
Oregon	12	465.00	1	25.00	11	415.00	25	1,045.50	1	35.00
Willamette	67	2,999.17	78	2,410.00	107	4,520.00	291	11,681.10	44	1,980.00
Washington—Puget sound	71	3,097.50	21	527.50	17	635.10	152	5,884.25	1	40.00

CUSTOMS DISTRICTS.	STEWARDS AND STOREKEEPERS.		WAITERS.		BOYS.		CHAMBERMAIDS AND STEWARDESSES.		CARPENTERS.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	177	$8,870.00	455	$11,612.58	140	$3,517.00	18	$445.00	32	$1,670.00
Total for California	104	5,242.00	250	6,450.08	61	1,545.00	12	290.00	25	1,320.00
Total for Oregon	56	2,763.00	168	4,217.50	76	1,897.00	6	155.00	6	300.00
Total for Washington	17	865.00	37	945.00	3	75.00	....	....	1	50.00
California	104	5,242.00	250	6,450.08	61	1,545.00	12	290.00	25	1,320.00
Wilmington	1	90.00	4	140.08	1	20.00	....	....	....	....
San Francisco	103	5,152.00	246	6,310.00	60	1,525.00	12	290.00	25	1,320.00
Humboldt	....	....	....	....	....	....	....	....	....	....
Oregon	56	2,763.00	168	4,217.50	76	1,897.00	6	155.00	6	300.00
Southern Oregon	....	....	....	....	....	....	....	....	....	....
Yaquina	1	75.00	5	125.00	....	....	1	25.00	1	50.00
Oregon	4	170.00	1	25.00	1	25.00	....	....	1	50.00
Willamette	51	2,518.00	162	4,067.50	75	1,872.00	5	130.00	4	200.00
Washington—Puget sound	17	865.00	37	945.00	3	75.00	....	....	1	50.00

EARNINGS AND EXPENSES—Continued.

TABLE 13.—EMPLOYÉS AND WAGES IN DETAIL—Continued.

SAILING VESSELS.

CUSTOMS DISTRICTS.	Number of vessels.	TOTAL.		CAPTAINS.		FIRST MATES.		SECOND MATES, THIRD MATES, AND BOATSWAINS.		CLERKS AND PURSERS.		SURGEONS.	
		Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	647	4,571	$209,957.64	647	$53,904.51	399	$20,789.90	294	$13,200.00	1	$100.00		
Total for California	577	3,848	178,274.43	577	47,942.40	339	17,657.40	242	10,880.00	1	100.00		
Total for Oregon	18	69	2,950.71	18	1,197.11	10	492.50	2	90.00				
Total for Washington	52	654	28,732.50	52	4,765.00	50	2,640.00	50	2,230.00				
California	577	3,848	178,274.43	577	47,942.40	339	17,657.40	242	10,880.00	1	100.00		
San Diego	7	20	892.75	7	405.00	2	65.00						
Wilmington	8	29	1,359.88	8	515.00	2	105.00	2	90.00				
San Francisco	549	3,699	171,407.00	549	45,840.00	323	16,885.00	228	10,265.00	1	100.00		
Humboldt	13	100	4,614.80	13	1,182.40	12	602.40	12	525.00				
Oregon	18	69	2,950.71	18	1,197.11	10	492.50	2	90.00				
Southern Oregon	1	7	360.00	1	100.00	1	50.00						
Oregon	14	30	1,415.71	14	797.11	7	332.50						
Willamette	3	32	1,175.00	3	300.00	2	110.00	2	90.00				
Washington—Puget sound	52	654	28,732.50	52	4,765.00	50	2,640.00	50	2,230.00				

CUSTOMS DISTRICTS.	FIRST ENGINEERS.		SECOND ENGINEERS AND THIRD ENGINEERS.		FIREMEN AND COAL PASSERS.		WHEELMEN AND PILOTS.		LOOKOUTS.		WATCHMEN.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total							6	$305.00	5	$195.00	7	$295.00
Total for California							6	305.00	5	195.00	7	295.00
Total for Oregon												
Total for Washington												
California							6	305.00	5	195.00	7	295.00
San Diego									1	30.00		
Wilmington												
San Francisco							6	305.00	4	165.00	7	295.00
Humboldt												
Oregon												
Southern Oregon												
Oregon												
Willamette												
Washington—Puget sound												

EARNINGS AND EXPENSES—Continued.

TABLE 13.—EMPLOYÉS AND WAGES IN DETAIL—Continued.

SAILING VESSELS—Continued.

CUSTOMS DISTRICTS.	COOKS AND BAKERS.		COOKS' ASSISTANTS, PANTRYMEN, AND BUTCHERS.		SEAMEN.		DECK HANDS AND PORTERS.		OILERS AND WATER TENDERS.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	430	$20,795.00	126	$2,580.00	2,531	$92,727.23				
Total for California	372	18,070.00	79	1,655.00	2,126	77,503.63				
Total for Oregon	6	250.00	2	45.00	27	751.10				
Total for Washington	52	2,475.00	45	880.00	378	14,472.50				
California	372	18,070.00	79	1,655.00	2,126	77,503.63				
San Diego	4	150.00			6	242.75				
Wilmington	3	150.00			14	499.88				
San Francisco	354	17,235.00	79	1,655.00	2,054	74,991.00				
Humboldt	11	535.00			52	1,770.00				
Oregon	6	250.00	2	45.00	27	751.10				
Southern Oregon	1	50.00			4	160.00				
Oregon	3	120.00			6	166.10				
Willamette	2	80.00	2	45.00	17	425.00				
Washington—Puget sound	52	2,475.00	45	880.00	378	14,472.50				

CUSTOMS DISTRICTS.	STEWARDS AND STOREKEEPERS.		WAITERS.		BOYS.		CHAMBERMAIDS AND STEWARDESSES.		CARPENTERS.	
	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.	Number.	Wages per month.
Total	15	$570.00			23	$341.00			87	$4,155.00
Total for California	14	535.00			22	331.00			58	2,805.00
Total for Oregon	1	35.00			1	10.00			2	80.00
Total for Washington									27	1,270.00
California	14	535.00			22	331.00			58	2,805.00
San Diego										
Wilmington										
San Francisco	14	535.00			22	331.00			58	2,805.00
Humboldt										
Oregon	1	35.00			1	10.00			2	80.00
Southern Oregon										
Oregon										
Willamette	1	35.00			1	10.00			2	80.00
Washington—Puget sound									27	1,270.00

EARNINGS AND EXPENSES—Continued.

TABLE 14.—EMPLOYÉS AND WAGES BY COAST TOTALS—AGGREGATE AND AVERAGE MONTHLY WAGES PAID TO EACH GRADE OF EMPLOYÉS ON ALL VESSELS ENGAGED IN PASSENGER AND FREIGHT TRAFFIC ON THE PACIFIC COAST, EXCLUSIVE OF FERRYBOATS.

EMPLOYÉS.	ALL CRAFT.			STEAMERS.			SAILING VESSELS.		
	Number employed.	Aggregate wages for one month.	Average monthly wages.	Number employed.	Aggregate wages for one month.	Average monthly wages.	Number employed.	Aggregate wages for one month.	Average monthly wages.
Total	10,396	$521,502.86	$50.16	5,825	$311,545.22	$53.48	4,571	$209,957.64	$45.93
Captains	1,001	95,175.97	95.08	354	41,271.46	116.59	647	53,904.51	83.31
First mates	685	39,573.77	57.77	286	18,783.87	65.68	399	20,789.90	52.11
Second mates, third mates, and boatswains	432	20,756.16	48.05	138	7,556.16	54.75	294	13,200.00	44.90
Clerks and pursers	189	12,652.50	66.94	188	12,552.50	66.77	1	100.00	100.00
Surgeons	[illegible]	110.00	55.00	2	110.00	55.00			
First engineers	353	35,798.54	101.41	353	35,798.54	101.41			
Second and third engineers	251	18,650.00	74.30	251	18,650.00	74.30			
Firemen and coal passers	657	29,847.26	45.43	657	29,847.26	45.43			
Wheelmen and pilots	134	9,509.17	70.96	128	9,204.17	71.91	6	305.00	50.83
Lookouts	24	1,039.50	43.31	19	844.50	44.45	5	195.00	39.00
Watchmen	160	6,702.73	41.89	153	6,407.73	41.88	7	295.00	42.14
Cooks and bakers	726	35,339.45	48.68	296	14,544.45	49.14	430	20,795.00	48.36
Cooks' assistants, pantrymen, and butchers	393	10,952.28	27.87	267	8,372.28	31.36	126	2,580.00	20.48
Seamen	3,331	127,817.33	38.37	800	35,090.10	43.86	2,531	92,727.23	36.64
Deck hands and porters	939	38,344.25	40.84	939	38,344.25	40.84			
Oilers and water tenders	172	8,053.37	46.82	172	8,053.37	46.82			
Stewards and storekeepers	192	9,440.00	49.17	177	8,870.00	50.11	15	570.00	38.00
Waiters	455	11,612.58	25.52	455	11,612.58	25.52			
Boys	163	3,858.00	23.67	140	3,517.00	25.12	23	341.00	14.83
Chambermaids and stewardesses	18	445.00	24.72	18	445.00	24.72			
Carpenters	119	5,825.00	48.95	32	1,670.00	52.19	87	4,155.00	47.76

TABLE 15.—FUEL ACCOUNT—AMOUNT AND VALUE OF THE COAL AND WOOD USED AS FUEL ON PASSENGER AND FREIGHT STEAMERS, FERRYBOATS, HARBOR TUGS, AND STEAM YACHTS OF THE PACIFIC COAST.

CUSTOMS DISTRICTS.	Total cost of fuel.	COAL.		WOOD.	
		Tons.	Cost.	Cords.	Cost.
Total	$2,467,882.17	371,977	$2,117,032.65	163,669	$350,849.52
California	1,697,578.80	291,980	1,670,316.60	14.299	27,262.20
San Diego	10,499.40	1,842	10,499.40		
Wilmington	16,249.70	1,878	16,244.70	[illegible]	5.00
San Francisco	1,655,672.50	286,625	1,633,762.50	10,955	21,910.00
Humboldt	15,157.20	1,635	9,810.00	3,342	5,347.20
Oregon	548,186.25	54,743	340,649.25	95,643	207,537.00
Southern Oregon	5,616.10	3	22.50	3,496	5,593.60
Yaquina	26,181.90	2,945	22,087.50	2,559	4,094.40
Oregon	30,277.85	79	485.85	14,896	29,792.00
Willamette	486,110.40	51,716	318,053.40	74,692	168,057.00
Washington—Puget sound	222,117.12	25,254	106,066.80	53,727	116,050.32

GENERAL OPERATIONS BY CLASSES.

TABLE 16.—PASSENGER AND FREIGHT VESSELS—NUMBER, TONNAGE, VALUE, TRAFFIC OPERATIONS, FINANCIAL ACCOUNT, AND DETAILS OF CREWS AND WAGES OF ALL VESSELS ENGAGED IN THE TRANSPORTATION OF PASSENGERS AND FREIGHT ON THE PACIFIC COAST, EXCLUSIVE OF FERRYBOATS.

ALL CRAFT.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
Total	1,490	387,325	$19,598,440	198,707	11,093,537	8,803,591	1,380,234

CUSTOMS DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total	$18,112,955.63	$14,898,141.32	$3,214,814.31	3,331	$38.37	10,396	30,332	$5,212,639.20

STEAMERS.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
Total	354	129,491	$12,660,755	159,721	5,586,182	5,727,168	1,380,234
California	147	73,833	7,657,705	23,134	2,377,030	2,684,363	211,171
Wilmington	5	756	149,500	410	48,752	144,726	12,305
San Francisco	136	72,626	7,479,705	19,218	2,304,871	2,420,955	173,906
Humboldt	6	451	28,500	3,506	23,407	118,682	24,960
Oregon	114	45,016	4,027,200	104,542	1,588,444	891,784	775,665
Southern Oregon	12	651	48,300	6,522	96,566	119,499	32,585
Yaquina	7	1,077	125,000	2,928	67,050	31,491	14,597
Oregon	33	2,897	247,600	13,692	276,076	242,130	98,006
Willamette	62	40,391	3,606,300	81,400	1,148,752	498,664	630,477
Washington—Puget sound	93	10,642	975,850	32,045	1,620,708	2,151,021	393,398

CUSTOMS DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total	$11,200,131.71	$9,495,771.45	$1,704,360.26	800	$43.86	5,825	15,807	$2,924,205.19
California	6,507,530.74	5,402,795.34	1,104,735.40	659	44.38	3,342	9,866	1,703,263.70
Wilmington	61,347.92	60,425.69	922.23	4	45.00	49	82	25,826.45
San Francisco	6,390,204.61	5,295,690.96	1,094,513.65	655	44.38	3,270	9,740	1,655,683.25
Humboldt	55,978.21	46,678.69	9,299.52	....	....	23	44	21,754.00
Oregon	3,580,464.66	3,233,109.34	347,355.32	124	41.97	1,738	4,041	832,502.84
Southern Oregon	49,246.61	36,686.55	12,560.06	....	....	42	56	25,984.00
Yaquina	84,463.34	99,394.85	[a]14,931.51	6	45.00	60	185	36,153.31
Oregon	199,086.11	154,522.80	44,563.31	11	37.73	168	499	88,927.37
Willamette	3,247,668.60	2,942,505.14	305,163.46	107	42.24	1,468	3,301	681.438.16
Washington—Puget sound	1,112,136.31	859,866.77	252,269.54	17	37.36	745	1,900	388,438.65

SAILING VESSELS.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
Total	647	194,478	$6,112,340	38,986	5,507,355	2,761,826	....
California	577	150,825	5,236,900	36,299	4,916,486	2,401,593	....
San Diego	7	222	20,350	66	15,274	2,300	....
Wilmington	8	588	27,400	229	26,436	7,571	....
San Francisco	549	146,924	4,948,150	35,168	4,772,113	2,351,598	....
Humboldt	13	3,091	241,000	836	102,663	40,124	....

[a] Deficit.

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE **16.**—PASSENGER AND FREIGHT VESSELS—Continued.

SAILING VESSELS—Continued.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
Oregon	18	2,022	$53,385	1,608	59,062	34,050	....
Southern Oregon	1	90	8,000	21	8,920	2,916	....
Oregon	14	220	10,350	1,564	19,742	21,097	....
Willamette	3	1,712	35,035	23	30,400	10,037	....
Washington—Puget sound	52	41,631	822,055	1,079	531,807	326,183	....

CUSTOMS DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total	$6,912,823.92	$5,402,369.87	$1,510,454.05	2,531	$36.64	4,571	14,525	$2,288,434.01
California	5,884,740.48	4,566,343.25	1,318,397.23	2,126	36.46	3,848	12,627	1,966,774.60
San Diego	10,640.00	9,552.10	1,087.90	6	40.46	20	33	4,143.73
Wilmington	25,533.54	24,182.89	1,350.65	14	35.71	29	60	13,201.00
San Francisco	5,747,932.87	4,453,288.01	1,294,644.86	2,054	36.51	3,699	12,280	1,904,194.72
Humboldt	100,634.07	79,320.25	21,313.82	52	34.04	100	254	45,235.15
Oregon	81,558.05	54,783.41	26,774.64	27	27.82	69	103	27,028.75
Southern Oregon	6,387.00	5,936.00	451.00	4	40.00	7	7	3,500.00
Oregon	19,375.74	11,303.52	8,072.22	6	27.68	30	43	10,388.75
Willamette	55,795.31	37,543.89	18,251.42	17	25.00	32	53	13,140.00
Washington—Puget sound	946,525.39	781,243.21	165,282.18	378	38.29	654	1,795	294,630.66

UNRIGGED CRAFT.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
Total	489	63,356	$825,345	....	....	314,597	....
San Diego, California	28	1,966	12,975	....	....	33,064	....
Wilmington, California	33	3,935	62,000	....	....	(*a*)	....
San Francisco, California	146	27,082	506,700	....	....	27,000	....
Humboldt, California	22	2,290	19,525	....	....	2,900	....
Southern Oregon, Oregon	93	3,026	20,690	....	....	55,860	....
Yaquina, Oregon	3	40	200	....	....	(*a*)	....
Oregon, Oregon	28	1,491	13,810	....	....	(*a*)	....
Willamette, Oregon	34	11,002	109,400	....	....	32,030	....
Puget sound, Washington	102	12,524	80,045	....	....	163,743	....

CUSTOMS DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)
San Diego, California								
Wilmington, California								
San Francisco, California								
Humboldt, Cailfornia								
Southern Oregon, Oregon								
Yaquina, Oregon								
Oregon, Oregon								
Willamette, Oregon								
Puget sound, Washington								

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a Included in steamers.

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 17.—FERRYBOATS—NUMBER, TONNAGE, VALUE, TRAFFIC OPERATIONS, FINANCIAL ACCOUNT, AND DETAILS OF CREWS AND WAGES OF FERRYBOATS.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
Total	38	24, 630	$979, 300	473, 963	1, 179, 978	14, 772	2, 639, 095
California	20	22 551	816, 000	176, 783	946, 092	20	614, 006
San Diego	3	488	31, 500	39, 158	43, 867	20	545, 558
San Francisco	17	22, 063	784, 500	137, 625	902, 225	....	68, 448
Oregon	16	1, 783	118, 300	284, 554	200. 991	13, 893	1, 922, 838
Southern Oregon	1	20	1. 200	184	1, 656	....	1, 275
Yaquina	1	16	900	1, 072	1, 108	92	1, 125
Willamette	14	1, 747	116, 200	283, 298	198, 227	13, 801	1, 920, 438
Washington—Puget sound	2	296	45, 000	12, 626	32, 895	859	102, 251

CUSTOMS DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total	$994, 475 95	$964, 904. 32	$29, 571. 63	126	$59. 00	478	1, 150	$395, 157
California	848, 798. 19	846, 558. 39	2, 239. 80	126	59. 00	397	1, 011	330, 315
San Diego	31, 379. 72	31, 684. 92	*a*305. 20	....	....	18	29	8, 575
San Francisco	817, 418. 47	814, 873. 47	2, 545. 00	126	59. 00	379	982	321, 740
Oregon	127. 010. 68	100, 000. 34	27, 010. 34	....	....	71	119	54, 814
Southern Oregon	1, 170. 00	943. 00	227. 00	....	....	3	6	800
Yaquina	600. 00	420. 00	180. 00	....	....	1	1	300
Willamette	125, 240. 68	98, 637. 34	26, 603. 34	....	....	67	112	53, 714
Washington—Puget sound	18, 667. 08	18, 345. 59	321. 49	....	....	10	20	10, 028

a Deficit.

TABLE 18.—FISHING VESSELS—NUMBER, TONNAGE, OPERATIONS, FINANCIAL ACCOUNT, AND DETAILS OF CREWS AND WAGES OF FISHING VESSELS NOT ENGAGED IN THE TRANSPORTATION OF FISHERY PRODUCTS AS FREIGHT. (*a*)

STEAMERS AND SAILING VESSELS.

PORTS.	Number.	Tonnage.	Value.	Trips.	Miles.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total	84	10, 715	$692, 455	1, 183	406, 638	$719, 872. 25	$697, 836. 45	$22, 035. 80	790	$34. 97	866	1, 485	$247, 028. 56
STEAMERS.													
Total	24	4, 343	411, 500	857	117, 400	277, 308. 91	307, 796. 52	*b*30, 487. 61	190	40. 79	136	532	114, 834. 93
San Francisco, California	14	3, 960	341, 000	627	104, 350	241, 440. 46	275, 746. 67	*b*34, 306. 21	173	40. 35	95	364	99, 158. 93
Yaquina, Oregon	1	106	25, 000	4	1, 400	19, 350. 00	15, 531. 40	3, 818. 60	8	45. 00	13	117	5, 670. 00
Oregon, Oregon	5	185	24, 000	26	6, 650	12, 192. 00	12, 192. 00	....	5	50. 00	12	32	6, 120. 00
Willamette, Oregon	3	79	20, 000	200	5, 000	4, 326. 45	4, 326. 45	....	3	41. 67	13	16	3, 571. 00
Puget sound, Washington	1	13	1, 500	(*c*)	(*c*)	(*c*)	(*c*)	(*c*)	1	35. 00	3	3	315. 00
SAILING VESSELS.													
Total	60	6, 372	280, 955	326	289, 238	442, 563. 34	390, 039. 93	52, 523. 41	600	33. 13	730	953	132, 193. 63
San Diego, California	2	31	2, 625	34	10, 432	6, 810. 00	2, 155. 70	4, 654. 30	3	27. 50	7	7	1, 465. 25
San Francisco, California	40	5, 866	239, 900	75	233, 476	404, 077. 40	351, 987. 22	52, 090. 18	513	33. 85	614	810	107, 178. 72
Oregon, Oregon	10	137	12, 730	210	7, 610	6, 087. 95	4, 665. 75	1, 422. 20	13	23. 68	19	19	2, 912. 00
Puget sound, Washington	8	338	25, 700	7	37, 720	25, 587. 99	31, 231. 26	*b*5, 643. 27	71	29. 85	90	117	20, 637. 66

a Including whalers and sealers.
b Deficit.
c Not reported.

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 19.—HARBOR TUGS—NUMBER, TONNAGE, VALUE, FINANCIAL ACCOUNT, AND DETAILS OF CREWS AND WAGES OF HARBOR TUGS AND OTHER FLOATING CHANNEL PROPERTY.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total	70	6,109	$1,120,800	$765,305.72	$678,220.48	$87,085.24	25	$42.59	374	573	$247,630.49
California	52	4,279	833,500	626,727.37	544,108.54	82,618.83	21	42.13	274	352	191,706.30
San Diego	4	294	28,500	11,127.75	14,300.12	*a*3,172.37	....	....	14	19	6,778.15
Wilmington	1	89	22,000	3,058.22	3,151.15	*a*92.93	....	....	7	15	1,243.15
San Francisco	44	3,626	732,000	566,031.40	486,103.66	79,927.74	19	41.30	230	295	166,950.00
Humboldt	3	270	51,000	46,510.00	40,553.61	5,956.39	2	50.00	23	23	16,735.00
Oregon	9	484	108,300	28,265.54	23,431.80	4,833.74	2	50.00	35	45	17,323.56
Southern Oregon	2	100	21,100	6,082.72	4,775.81	1,306.91	....	....	7	7	3,309.66
Yaquina	2	126	44,500	14,814.29	12,914.29	1,900.00	....	....	11	15	9,401.40
Oregon	1	14	2,000	1,200.00	534.20	665.80	1	60.00	3	6	390.00
Willamette	4	244	40,700	6,168.53	5,207.50	961.03	1	40.00	14	17	4,222.50
Washington—Puget sound	9	1,346	179,000	110,312.81	110,680.14	*a*367.33	2	40.00	65	176	38,600.63

a Deficit.

TABLE 20.—PILOT BOATS—NUMBER, TONNAGE, VALUE, EXPENSE ACCOUNT, AND DETAILS OF CREWS AND WAGES OF PILOT BOATS.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Expenses.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total	9	418	$49,700	$35,706.73	14	$33.77	31	71	$16,310
San Diego, California	1	20	3,000	2,750.00	1	22.75	3	3	2,250
Wilmington, California	1	8	2,500	1,750.00	1	25.00	3	3	1,440
San Francisco, California	4	230	24,500	24,236.72	9	35.00	17	57	8,820
Oregon, Oregon	2	141	19,000	5,468.36	2	40.00	5	5	2,760
Puget sound, Washington	1	19	700	1,501.65	1	30.00	3	3	1,040

TABLE 21.—YACHTS AND PLEASURE BOATS—NUMBER, TONNAGE, VALUE, AND DETAILS OF CREWS AND WAGES OF YACHTS AND PLEASURE BOATS.

STEAMERS AND SAILING VESSELS.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total	28	675	$75,800	16	$36.68	36	45	$8,685.44
STEAMERS.								
Total	3	63	6,500	....	....	5	6	234.00
San Diego, California	1	18	2,500	....	....	2	2	34.00
Puget sound, Washington	2	45	4,000	....	....	3	4	200.00
SAILING VESSELS.								
Total	25	612	69,300	16	36.68	31	39	8,451.44
San Diego, California	7	101	8,500	4	25.00	8	13	930.00
Wilmington, California	4	98	7,500	2	35.00	6	7	1,680.00
San Francisco, California	13	405	52,800	9	42.25	15	17	5,528.00
Puget sound, Washington	1	8	500	1	36.68	2	2	313.44

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 22.—NO TRAFFIC REPORT—NUMBER, TONNAGE, AND VALUE OF ALL STEAMERS AND SAILING VESSELS OVER FIVE TONS REGISTERED OR OWNED ON THE PACIFIC COAST IN 1889 FOR WHICH NO TRAFFIC REPORT WAS RECEIVED.

STEAMERS AND SAILING VESSELS.

CUSTOMS DISTRICTS.	TOTAL.			OUT OF COMMISSION.			OTHERWISE NOT REPORTED ON. (a)		
	Number.	Tonnage.	Value.	Number.	Tonnage.	Value.	Number.	Tonnage.	Value.
Total	123	12,067	$550,875	74	8,312	$410,400	49	3,755	$140,475

STEAMERS.

CUSTOMS DISTRICTS.	TOTAL.			OUT OF COMMISSION.			OTHERWISE NOT REPORTED ON. (a)		
	Number.	Tonnage.	Value.	Number.	Tonnage.	Value.	Number.	Tonnage.	Value.
Total	42	5,867	347,600	33	5,416	303,100	9	451	44,500
California	17	2,026	142,200	15	1,976	131,200	2	50	11,000
Wilmington	4	88	17,000	4	88	17,000	....	....	....
San Francisco	12	1,874	122,200	10	1,824	111,200	2	50	11,000
Humboldt	1	64	3,000	1	64	3,000	....	....	....
Oregon	17	2,975	169,400	13	2,685	141,400	4	290	28,000
Yaquina	2	956	92,000	2	956	92,000	....	....	....
Oregon	2	76	10,500	1	19	500	1	57	10.000
Willamette	13	1,943	66,900	10	1,710	48,900	3	233	18,000
Washington—Puget sound	8	866	36,000	5	755	30,500	3	111	5,500

SAILING VESSELS.

CUSTOMS DISTRICTS.	TOTAL.			OUT OF COMMISSION.			OTHERWISE NOT REPORTED ON. (a)		
	Number.	Tonnage.	Value.	Number.	Tonnage.	Value.	Number.	Tonnage.	Value.
Total	81	6,200	203,275	41	2,896	107,300	40	3,304	95,975
California	48	5,362	175,750	22	2,632	94,250	26	2,730	81,500
San Diego	4	87	2,500	2	44	1,000	2	43	1,500
San Francisco	43	5,094	168,750	20	2,588	93,250	23	2,506	75,500
Humboldt	1	181	4,500	....	....	....	1	181	4,500
Oregon	13	476	11,950	8	142	6,650	5	334	5,300
Oregon	10	192	8,000	7	129	6,500	3	63	1,500
Willamette	3	284	3,950	1	13	150	2	271	3,800
Washington—Puget sound	20	362	15.575	11	122	6,400	9	240	9,175

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[a] Lost prior to or during 1889, sold to foreign owners, or untraceable.

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 23.—SUMMARY—NUMBER, TONNAGE, VALUE, TRAFFIC OPERATIONS, FINANCIAL ACCOUNT, AND DETAILS OF CREWS AND WAGES OF ALL VESSELS OF EVERY CLASS OF OCCUPATION OVER FIVE TONS REGISTERED OR OWNED ON THE PACIFIC COAST IN 1889, GROUPED BY DISTRICTS.

ALL CRAFT.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
Total steam, sail, and unrigged	1, 842	441, 939	$23, 067, 370	673, 853	12, 680, 153	8, 818, 363	4, 019, 329

CUSTOMS DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total steam, sail, and unrigged	$20, 628, 316. 28	$17, 274, 809. 30	$3,353,506.98	4, 302	$38. 36	12, 181	33, 656	$6, 127, 450. 69

STEAMERS.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
Total	531	170, 503	$15, 526, 455	634, 541	6, 883, 560	5, 741, 940	4, 019. 329
San Diego, California	8	800	62, 500	39, 158	43, 867	20	545, 558
Ferry	3	488	31, 500	39, 158	43, 867	20	545, 558
Harbor tugs	4	294	28, 500				
Yachts	1	18	2, 500				
Wilmington, California	10	933	188, 500	410	48, 752	144, 726	12, 305
Freight and passenger	5	756	149, 500	410	48, 752	144, 726	12, 305
Harbor tugs	1	89	22, 000				
No traffic report	4	88	17, 000				
San Francisco, California	223	104, 149	9, 459, 405	157, 470	3, 311, 446	2, 420, 955	242, 354
Freight and passenger	136	72, 626	7, 479, 705	19, 218	2, 304, 871	2, 420, 955	173, 906
Ferry	17	22, 063	784, 500	137, 625	902, 225		68, 448
Fish	14	3, 960	341, 000	627	104, 350		
Harbor tugs	44	3, 626	732, 000				
No traffic report	12	1, 874	122, 200				
Humboldt, California	10	785	82, 500	3, 506	23, 407	118, 682	24, 960
Freight and passenger	6	451	28, 500	3, 506	23, 407	118, 682	24, 960
Harbor tugs	3	270	51, 000				
No traffic report	1	64	3, 000				
Southern Oregon, Oregon	15	771	70, 600	6, 706	98, 222	119, 499	33, 860
Freight and passenger	12	651	48, 300	6, 522	96, 566	119, 499	32, 585
Ferry	1	20	1, 200	184	1, 656		1, 275
Harbor tugs	2	100	21. 100				
Yaquina, Oregon	13	2, 281	287, 400	4, 004	69, 558	31, 583	15, 722
Freight and passenger	7	1, 077	125, 060	2, 928	67. 050	31, 491	14, 597
Ferry	1	16	900	1, 072	1, 108	92	1, 125
Fish	1	106	25, 000	4	1, 400		
Harbor tugs	2	126	44, 500				
No traffic report	2	956	92, 000				
Oregon, Oregon	41	3, 172	284, 100	13, 718	282, 726	242, 130	98, 006
Freight and passenger	33	2, 897	247, 600	13, 692	276, 076	242, 130	98, 006
Fish	5	185	24, 000	26	6, 650		
Harbor tugs	1	14	2, 000				
No traffic report	2	76	10, 500				
Willamette, Oregon	96	44, 404	3, 850, 100	364, 898	1, 351, 979	512, 465	2, 550, 915
Freight and passenger	62	40. 391	3, 606, 300	81, 400	1, 148, 752	498, 664	630, 477
Ferry	14	1. 747	116, 200	283, 298	198, 227	13, 801	1, 920, 438
Fish	3	79	20, 000	200	5, 000		
Harbor tugs	4	244	40, 700				
No traffic report	13	1, 943	66, 900				

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 23.—SUMMARY—Continued.

STEAMERS—Continued.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
Puget sound, Washington	115	13,208	$1,241,350	44,671	1,653,603	2,151,880	495,649
Freight and passenger	93	10,642	975,850	32,045	1,620,708	2,151,021	393,398
Ferry	2	296	45,000	12,626	32,895	859	102,251
Fish	1	13	1,500	(a)	(a)		
Harbor tugs	9	1,346	179,000				
Yachts	2	45	4,000				
No traffic report	8	866	36,000				

CUSTOMS DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total	$13,237,222.29	$11,446,692.77	$1,790,529.52	1,141	$44.99	b6,818	18,068	b$3,682,061.61
San Diego, California	42,507.47	45,985.04	c3,477.57			34	50	15,387.15
Ferry	31,379.72	31,684.92	c305.20			18	29	8,575.00
Harbor tugs	11,127.75	14,300.12	c3,172.37			14	19	6,778.15
Yachts						2	2	34.00
Wilmington, California	64,406.14	63,576.84	829.30	4	45.00	56	97	27,069.60
Freight and passenger	61,347.92	60,425.69	922.23	4	45.00	49	82	25,826.45
Harbor tugs	3,058.22	3,151.15	c92.93			7	15	1,243.15
San Francisco, California	8,015,094.94	6,872,414.76	1,142,680.18	973	45.50	3,974	11,381	2,243,532.18
Freight and passenger	6,390,204.61	5,295,690.96	1,094,513.65	655	44.38	3,270	9,740	1,655,683.25
Ferry	817,418.47	814,873.47	2,545.00	126	59.00	379	982	321,740.00
Fish	241,440.46	275,746.67	c34,306.21	173	40.35	95	364	99,158.93
Harbor tugs	566,031.40	486,103.66	79,927.74	19	41.30	230	295	166,950.00
Humboldt, California	102,488.21	87,232.30	15,255.91	2	50.00	46	67	38,489.00
Freight and passenger	55,978.21	46,678.69	9,299.52			23	44	21,754.00
Harbor tugs	46,510.00	40,553.61	5,956.39	2	50.00	23	23	16,735.00
Southern Oregon, Oregon	56,499.33	42,405.36	14 093.97			52	69	30,093.66
Freight and passenger	49,246.61	36,686.55	12,560.06			42	56	25,984.00
Ferry	1,170.00	943.00	227.00			3	5	800.00
Harbor tugs	6,082.72	4.775.81	1,306.91			7	7	3,309.66
Yaquina, Oregon	119,227.63	128,260.54	c9,032.91	14	45.00	85	318	51,524.71
Freight and passenger	84,463.34	99,394.85	c14,931.51	6	45.00	60	185	36,153.31
Ferry	600.00	420.00	180.00			1	1	300.00
Fish	19,350.00	15,531.40	3,818.60	8	45.00	13	117	5,670.00
Harbor tugs	14,814.29	12,914.29	1,900.00			11	15	9,401.40
Oregon, Oregon	212,478.11	167,249.00	45,229.11	17	42.65	183	537	95,437.37
Freight and passenger	199,086.11	154,522.80	44,563.31	11	37.73	168	499	88,927.37
Fish	12,192.00	12,192.00		5	50.00	12	32	6,120.00
Harbor tugs	1,200.00	534.20	665.80	1	60.00	3	6	390.00
Willamette, Oregon	3,383,404.26	3,050,676.43	332,727.83	111	42.20	1,562	3,446	742,945.66
Freight and passenger	3,247,668.60	2,942,505.14	305,163.46	107	42.24	1,468	3,301	681,438.16
Ferry	125,240.68	98,637.34	26,603.34			67	112	53,714.00
Fish	4,326.45	4,326.45		3	41.67	13	16	3,571.00
Harbor tugs	6,168.53	5,207.50	961.03	1	40.00	14	17	4,222.50
Puget sound, Washington	1,241,116.20	988,892.50	252,223.70	20	37.51	826	2,103	437,582.28
Freight and passenger	1,112,136.31	859,866.77	252,269.54	17	37.36	745	1,900	388,438.65
Ferry	18,667.08	18,345.59	321.49			10	20	10,028.00
Fish	(a)	(a)	(a)	1	35.00	3	3	315.00
Harbor tugs	110,312.81	110,680.14	c367.33	2	40.00	65	176	38,600.63
Yachts						3	4	200.00

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a Not reported.

b Includes unrigged.

c Deficit.

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 23.—SUMMARY—Continued.

SAILING VESSELS.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
Total	822	208,080	$6,715,570	39,312	5,796,593	2,761,826	...
San Diego, California	21	461	36,975	100	25,706	2,300	...
Freight	7	222	20,350	66	15,274	2,300	...
Fish	2	31	2,625	34	10,432	...	...
Pilot boats	1	20	3,000	...	...	...	...
Yachts	7	101	8,500	...	...	...	...
No traffic report	4	87	2,500	...	...	...	...
Wilmington, California	13	694	37,400	229	26,436	7,571	...
Freight	8	588	27,400	229	26,436	7,571	...
Pilot boats	1	8	2,500	...	...	...	...
Yachts	4	98	7,500	...	...	...	...
San Francisco, California	649	158,519	5,434,100	35,243	5,005,589	2,351,598	...
Freight	549	146,924	4,948,150	35,168	4,772,113	2,351,598	...
Fish	40	5,866	239,900	75	233,476	...	...
Pilot boats	4	230	24,500	...	...	...	...
Yachts	13	405	52,800	...	...	...	...
No traffic report	43	5,094	168,750	...	...	...	...
Humboldt, California	14	3,272	245,500	836	102,663	40,124	...
Freight	13	3,091	241,000	836	102,663	40,124	...
No traffic report	1	181	4,500	...	...	...	...
Southern Oregon, Oregon:							
Freight	1	90	8,000	21	8,920	2,916	...
Oregon, Oregon	36	690	50,080	1,774	27,352	21,097	...
Freight	14	220	10,350	1,564	19,742	21,097	...
Fish	10	137	12,730	210	7,610	...	...
Pilot boats	2	141	19,000	...	...	...	...
No traffic report	10	192	8,000	...	...	...	...
Willamette, Oregon	6	1,996	38,985	23	30,400	10,037	...
Freight	3	1,712	35,035	23	30,400	10,037	...
No traffic report	3	284	3,950	...	...	...	...
Puget sound, Washington	82	42,358	864,530	1,086	569,527	326,183	...
Freight	52	41,631	822,055	1,079	531,807	326,183	...
Fish	8	338	25,700	7	37,720	...	...
Pilot boats	1	19	700	...	...	...	...
Yachts	1	8	500	...	...	...	...
No traffic report	20	362	15,575	...	...	...	...

CUSTOMS DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total	$7,391,093.99	$5,828,116.53	$1,562,977.46	3,161	$35.96	5,363	15,588	$2,445,389.08
San Diego, California	20,200.00	14,457.80	5,742.20	14	32.00	38	56	8,788.98
Freight	10,640.00	9,552.10	1,087.90	6	40.46	20	33	4,143.73
Fish	6,810.00	2,155.70	4,654.30	3	27.50	7	7	1.465.25
Pilot boats	*a*2,750.00	2,750.00	...	1	22.75	3	3	2,250.00
Yachts	...	...	...	4	25.00	8	13	930.00
Wilmington, California	27,283.54	25,932.89	1,350.65	17	35.00	38	70	16,321.00
Freight	25.533.54	24,182.89	1,350.65	14	35.71	29	60	13,201.00
Pilot boats	*a*1,750.00	1,750.00	...	1	25.00	3	3	1,440.00
Yachts	...	...	...	2	35.00	6	7	1,680.00

a Gross earnings includes the boats' earnings only; professional earnings of the pilots are not included.

GENERAL OPERATIONS BY CLASSES—Continued.

TABLE 23.—SUMMARY—Continued.

SAILING VESSELS—Continued.

CUSTOMS DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
San Francisco, California	$6, 176, 246. 99	$4, 829, 511. 95	$1, 346, 735. 04	2, 585	$36. 00	4, 345	13, 164	$2, 025, 721. 44
Freight	5, 747, 932. 87	4, 453, 288. 01	1, 294, 644. 86	2, 054	36. 51	3, 699	12, 280	1. 904, 194. 72
Fish	404, 077. 40	351, 987. 22	52, 090. 18	513	33. 85	614	810	107, 178. 72
Pilot boats	*a*24. 236. 72	24, 236. 72		9	35. 00	17	57	8, 820. 00
Yachts				9	42. 25	15	17	5, 528. 00
Humboldt, California:								
Freight	100, 634. 07	79, 320. 25	21, 313. 82	52	34. 04	100	254	45, 235. 15
Southern Oregon, Oregon:								
Freight	6, 387. 00	5, 936. 00	451. 00	4	40. 00	7	7	3, 500. 00
Oregon, Oregon	30, 932. 05	21, 437. 63	9, 494. 42	21	26. 50	54	67	16, 060. 75
Freight	19, 375. 74	11, 303. 52	8, 072. 22	6	27. 68	30	43	10, 388. 75
Fish	6, 087. 95	4, 665. 75	1, 422. 20	13	23. 88	19	19	2, 912. 00
Pilot boats	*a*5, 468. 36	5, 468. 36		2	40. 00	5	5	2, 760. 00
Willamette, Oregon:								
Freight	55, 795. 31	37, 543. 89	18, 251. 42	17	25. 00	32	53	13, 140. 00
Puget sound, Washington	973, 615. 03	813, 976. 12	159, 638. 91	451	36. 94	749	1, 917	316, 621. 76
Freight	946, 525. 39	781, 243. 21	165, 282. 18	378	38. 29	654	1, 795	294, 630. 66
Fish	25, 587. 99	31, 231. 26	*b*5, 643. 27	71	29. 85	90	117	20, 637. 66
Pilot boats	*a*1, 501. 65	1, 501. 65		1	30. 00	3	3	1, 040. 00
Yachts				1	36. 68	2	2	313. 44

UNRIGGED CRAFT.

CUSTOMS DISTRICTS.	Number.	Tonnage.	Value.	Trips.	Miles.	Freight moved. (Tons.)	Passengers carried.
Total	489	63, 356	$825, 345			314, 597	
San Diego, California	28	1, 966	12, 975			33, 064	
Wilmington, California	33	3, 935	62, 000			(*c*)	
San Francisco, California	146	27, 082	506, 700			27, 000	
Humboldt, California	22	2, 290	19, 525			2, 900	
Southern Oregon, Oregon	93	3, 026	20, 690			55, 860	
Yaquina, Oregon	3	40	200			(*c*)	
Oregon, Oregon	28	1, 491	13, 810			(*c*)	
Willamette, Oregon	34	11, 002	109, 400			32, 030	
Puget sound, Washington	102	12, 524	80, 045			163. 743	

CUSTOMS DISTRICTS.	Gross earnings.	Expenses.	Net earnings.	Common seamen employed.	Average wages per month paid common seamen.	Number making ordinary crews.	Total number of men employed.	Total wages paid during year.
Total	(*c*)	(*c*)	(*c*)	(*c*)	(*c*)	(*c*)	(*c*)	(*c*)
San Diego, California								
Wilmington, California								
San Francisco, California								
Humboldt, California								
Southern Oregon, Oregon								
Yaquina, Oregon								
Oregon, Oregon								
Willamette, Oregon								
Puget sound, Washington								

a Gross earnings includes the boats' earnings only; professional earnings of the pilots are not included. *b* Deficit. *c* Included in steamers.

COMPARATIVE STATISTICS.

TABLE 24.—STEAMERS AND UNRIGGED CRAFT IN 1880 AND 1889—NUMBER, TONNAGE, AND VALUE OF STEAMERS AND UNRIGGED CRAFT IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES.

STATES AND YEARS.		ALL CRAFT.			STEAMERS.			UNRIGGED CRAFT.		
		Number.	Tonnage.	Value.	Number.	Tonnage.	Value.	Number.	Tonnage.	Value.
Total	1880	534	125, 090. 48	$6, 620, 980	319	97, 004. 88	$6, 477, 500	215	28, 085. 60	$143, 480
	1889	1, 020	233, 859. 00	16, 351, 800	531	170, 503. 00	15, 526, 455	489	63, 356. 00	825, 345
California	1880	266	73, 507. 80	3, 873, 380	a178	58, 828. 80	3, 763, 200	88	14, 679. 00	110, 180
	1889	480	141, 940. 00	10, 394, 105	251	106, 667. 00	9, 792, 905	229	35, 273. 00	601, 200
Oregon	1880	198	43, 657. 54	2, 207, 700	89	31, 370. 94	2, 177, 000	109	12, 286. 60	30, 700
	1889	323	66, 187. 00	4, 636, 300	165	50, 628. 00	4, 492, 200	158	15, 559. 00	144, 100
Washington	1880	70	7, 925. 14	539, 900	52	6, 805. 14	537, 300	18	1, 120. 00	2, 600
	1889	217	25, 732. 00	1, 321, 395	115	13, 208. 00	1, 241. 350	102	12, 524. 00	80, 045

a Exclusive of Pacific Mail interests owned in New York.

TABLE 25.—STEAMERS BY CLASSES IN 1880 AND 1889—NUMBER, TONNAGE, AND VALUE OF STEAMERS IN 1880 AND 1889, GIVEN BY CLASSES, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES.

CLASSES AND YEARS.		Number.	Tonnage.	Value.
Total	1880	319	97, 004. 88	$6, 477, 500
	1889	531	170, 503. 10	15, 526, 455
Passenger and freight	1880	224	70, 392. 43	4, 414, 900
	1889	354	129, 490. 38	12, 660, 755
Ferry	1880	32	21, 993. 99	1, 429, 100
	1889	38	24, 629. 26	979, 300
Towing and harbor	1880	52	4, 558. 49	614, 600
	1889	70	6, 109. 51	1, 120, 800
Miscellaneous	1880	11	59. 97	18, 900
	1889	69	10, 273. 95	765, 600

TABLE 26.—GROSS EARNINGS OF STEAMERS IN 1880 AND 1889—GROSS EARNINGS OF STEAMERS OPERATING IN 1880 AND 1889, TOGETHER WITH THE AMOUNT PAID OUT IN WAGES DURING THOSE YEARS, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES.

STATES AND YEARS.		Gross earnings.	Paid in wages.
Total	1880	$6, 362, 770	$1, 953, 451
	1889	13, 237, 222	3, 682, 062
California	1880	4, 011, 084	1, 158, 200
	1889	8, 224, 497	2, 324, 478
Oregon	1880	1. 983, 703	602, 576
	1889	3, 771, 609	920, 002
Washington	1880	367, 983	192, 675
	1889	1, 241, 116	437, 582

TABLE 27.—STEAMERS' CREWS AND WAGES IN 1880 AND 1889—NUMBER OF MEN CONSTITUTING ORDINARY CREWS EMPLOYED ON STEAMERS OPERATING IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES, TOGETHER WITH WAGES PAID AND AVERAGES OF ANNUAL PAY AND DECREASE OR INCREASE PER MAN, GIVEN BY LOCALITIES.

STATES AND YEARS.		Total number men, ordinary crews.	Total wages paid.	Average annual wages per man.	Average annual decrease in wages per man.
Total	1880	3, 008	$1, 953, 451	$649. 42	....
	1889	6, 818	3, 682, 062	540. 05	$109. 37
California	1880	1, 970	1, 158, 200	587. 92	....
	1889	4, 110	2, 324, 478	565. 57	22. 35
Oregon	1880	788	602, 576	764. 69	....
	1889	1, 882	920, 002	488. 84	275. 85
Washington	1880	250	192, 675	770. 70	....
	1889	826	437, 582	529. 76	240. 94

COMPARATIVE STATISTICS—Continued.

TABLE **28.**—STEAMER TRAFFIC IN 1880 AND 1889—NUMBER OF TONS OF FREIGHT MOVED AND NUMBER OF PASSENGERS CARRIED BY STEAMERS AND UNRIGGED CRAFT OPERATING IN 1880 AND 1889, GIVEN BY LOCALITIES, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES.

STATES AND YEARS.		FREIGHT IN TONS.			PASSENGERS.		
		Total.	By steamers.	By unrigged craft.	Total.	Regular.	Ferry.
Total	1880	2,087,293	2,087,293	....	6,604,712	300,752	6,303,960
	1889	8,488,101	*a*8,173,504	314,597	15,672,093	1,380,234	*b*14,291,859
California	1880	1,561,256	1,561,256	....	6,309,502	140,650	6,168,852
	1889	5,178,911	*a*5,115,947	62,964	12,477,941	211,171	*b*12,266,770
Oregon	1880	476,898	476,898	....	159,903	66,615	93,288
	1889	993,567	905,677	87,890	2,698,503	775,665	1,922,838
Washington	1880	49,139	49,139	....	135,307	93,487	41,820
	1889	2,315,623	2,151,880	163,743	495,649	393,398	102,25

a Including railroad ferry freight.

b Including railroad ferry passengers.

TABLE **29.**—FLEETS FOR THE TEN YEARS, 1880–1889—NUMBER AND TONNAGE OF ALL STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT REGISTERED IN THE CUSTOMS DISTRICTS OF THE PACIFIC COAST FOR THE TEN YEARS 1880–1889.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1880.								
Total	1,124	270,801.75	305	110,414.61	752	148,400.41	67	11,986.73
California	884	202,114.30	171	75,965.35	652	117,970.52	61	8,178.43
San Diego	17	975.26	2	147.94	15	827.32	....	....
San Francisco	867	201,139.04	169	75,817.41	637	117,143.20	61	8,178.43
Oregon	135	39,657.63	91	28,808.00	38	7,041.33	6	3,808.30
Southern Oregon	12	662.09	12	662.09	....	....	....	....
Oregon	46	2,360.79	17	1,037.86	29	1,322.93	....	....
Willamette	77	36,634.75	62	27,108.05	9	5,718.40	6	3,808.30
Washington—Puget sound	105	29,029.82	43	5,641.26	62	23,388.56	....	....
1881.								
Total	1,128	284,425.60	310	112,434.54	748	158,940.98	70	13,050.08
California	868	202,906.59	168	75,336.06	639	119,392.10	61	8,178.43
San Diego	21	1,053.94	2	147.94	19	906.00	....	....
San Francisco	847	201,852.65	166	75,188.12	620	118,486.10	61	8,178.43
Oregon	143	43,500.79	98	31,761.16	37	6,906.41	8	4,833.22
Southern Oregon	12	661.17	12	661.17	....	....	....	....
Oregon	44	2,270.04	18	1,399.90	26	870.14	....	....
Willamette	87	40,569.58	68	29,700.09	11	6,036.27	8	4,833.22
Washington—Puget sound	117	38,018.22	44	5,337.32	72	32,642.47	1	38.43
1882.								
Total	1,166	300,766.83	326	120 434.94	772	167,351.44	68	12,980.45
California	887	211,126.02	170	75,385.21	656	127,562.38	61	8,178.43
San Diego	27	3,068.17	5	255.23	22	2,812.94	....	....
San Francisco	860	208,057.85	165	75,129.98	634	124,749.44	61	8,178.43
Oregon	156	52,568.56	106	39,380.46	43	8,386.08	7	4,802.02
Southern Oregon	12	660.95	12	660.95	....	....	....	....
Oregon	50	3,770.80	20	1,521.21	30	2,249.59	....	....
Willamette	94	48,136.81	74	37,198.30	13	6,136.49	7	4,802.02
Washington—Puget sound	123	37,072.25	50	5,669.27	73	31,402.98	....	....

COMPARATIVE STATISTICS—Continued.

TABLE 29.—FLEETS FOR THE TEN YEARS, 1880–1889—Continued.

1883.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	1,169	326,944.94	349	134,435.75	812	186,536.21	8	5,972.98
California	884	230,168.26	185	87,293.86	699	142,874.40	....	....
San Diego	22	1.357.96	5	622.63	17	735.33	....	....
Wilmington	9	1,071.64	3	533.90	6	537.74	....	....
San Francisco	842	225,864.51	174	85,961.13	668	139,903.38	....	....
Humboldt	11	1,874.15	3	176.20	8	1.697.95	....	....
Oregon	145	52;994.69	102	39,155.01	35	7,866.70	8	5,972.98
Southern Oregon	12	706.15	12	706.15	....	....	....	....
Oregon	46	3,432.44	22	1,686.07	24	1,746.37	....	....
Willamette	87	48,856.10	68	36,762.79	11	6,120.33	8	5,972.98
Washington—Puget sound	140	43,781.99	62	7,986.88	78	35,795.11	....	....

1884.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	1,202	334,188.81	384	146,561.82	818	187,626.99	....	....
California	875	233,440.22	185	97,377.34	690	136,062.88	....	....
San Diego	14	344.45	4	209.31	10	135.14	....	....
Wilmington	11	1,422.54	3	533.90	8	888.64	....	....
San Francisco	823	227,673.06	169	95,620.02	654	132,053.04	....	....
Humboldt	27	4,000.17	9	1,014.11	18	2,986.06	....	....
Oregon	163	50,798.48	121	40,182.07	42	10,616.41	....	....
Southern Oregon	11	866.34	11	866.34	....	....	....	....
Yaquina	5	1,295.29	5	1,295.29	....	....	....	....
Oregon	57	3,887.45	30	2,107.43	27	1,780.02	....	....
Willamette	90	44.749.40	75	35,913.01	15	8.836.39	....	....
Washington—Puget sound	164	49,950.11	78	9,002.41	86	40,947.70	....	....

1885.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	1,250	360,110.56	402	153,808.04	840	200,329.54	8	5,972.98
California	900	251,142.60	194	101,757.24	706	149,385.36	....	....
San Diego	11	380.97	2	120.58	9	260.39	....	....
Wilmington	12	831.93	3	236.55	9	595.38	....	....
San Francisco	854	246,876.05	180	100,386.00	674	146,490.05	....	....
Humboldt	23	3,053.65	9	1.014.11	14	2,039.54	....	....
Oregon	184	59,191.81	129	42,626.54	47	10,592.29	8	5,972.98
Southern Oregon	14	1,554.19	12	1,417.39	2	136.80	....	....
Yaquina	5	1,307.39	5	1,307.39	....	....	....	....
Oregon	66	4,113.55	35	2.320.26	31	1,793.29	....	....
Willamette	99	52.216.68	77	37,581.50	14	8,662.20	8	5,972.98
Washington—Puget sound	166	49,776.15	79	9,424.26	87	40,351.89	....	....

COMPARATIVE STATISTICS—Continued.

TABLE 29.—FLEETS FOR THE TEN YEARS, 1880-1889—Continued.

1886.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	1,253	347,059.73	416	156,320.30	829	184,766.45	8	5,972.98
California	885	248,132.93	198	103,591.98	687	144,540.95	...	...
San Diego	13	203.00	2	34.16	11	168.84	...	...
Wilmington	13	919.70	3	307.93	10	611.77	...	...
San Francisco	833	243,413.77	183	102,178.08	650	141,235.69	...	...
Humboldt	26	3,596.46	10	1,071.81	16	2,524.65	...	...
Oregon	191	56,806.43	132	42,517.08	51	8,316.37	8	5,972.98
Southern Oregon	14	763.07	11	608.31	3	154.76	...	...
Yaquina	6	1,406.59	6	1,406.59	...	...	...	...
Oregon	68	2,816.20	34	2,161.17	34	655.03	...	...
Willamette	103	51,820.57	81	38,341.01	14	7,506.58	8	5,972.98
Washington—Puget sound	177	42,120.37	86	10,211.24	91	31,909.13	...	...

1887.

Total	1,217	355,814.58	426	160,139.75	783	189,701.85	8	5,972.98
California	864	254,092.29	203	111,049.41	661	143,042.88	...	...
San Diego	21	2,519.64	4	443.45	17	2,076.19	...	...
Wilmington	15	1,737.64	3	307.93	12	1,429.71	...	...
San Francisco	803	246,699.65	187	109,606.65	616	137,093.00	...	...
Humboldt	25	3,135.36	9	691.38	16	2,443.98	...	...
Oregon	188	52,261.69	137	38,697.60	43	7,591.11	8	5,972.98
Southern Oregon	12	554.39	11	538.08	1	16.31	...	...
Yaquina	10	3,332.84	10	3,332.84	...	...	...	...
Oregon	65	3,352.49	33	2,318.73	32	1,033.76	...	...
Willamette	101	45,021.97	83	32,507.95	10	6,541.04	8	5,972.98
Washington—Puget sound	165	49,460.60	86	10,392.74	79	39,067.86	...	...

1888.

Total	1,293	399,173.18	459	168,268.58	826	224,931.62	8	5,972.98
California	917	281,131.83	225	115,976.96	692	165,154.87	...	...
San Diego	31	2,167.62	7	1,088.50	24	1,079.12	...	...
Wilmington	18	2,598.41	5	580.95	13	2,017.46	...	...
San Francisco	837	271,063.19	204	113,725.12	633	157,338.07	...	...
Humboldt	31	5,302.61	9	582.39	22	4,720.22	...	...
Oregon	185	53,317.28	136	40,616.88	41	6,727.42	8	5,972.98
Southern Oregon	12	548.10	12	548.10	...	...	...	...
Yaquina	9	2,202.75	9	2,202.75	...	...	...	...
Oregon	67	4,462.93	34	2,188.38	33	2,274.55	...	...
Willamette	97	46,103.50	81	35,677.65	8	4,452.87	8	5,972.98
Washington—Puget sound	191	64,724.07	98	11,674.74	93	53,049.33	...	...

COMPARATIVE STATISTICS—Continued.

TABLE 29.—FLEETS FOR THE TEN YEARS, 1880-1889—Continued.

1889.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	1, 367	435, 004. 14	517	180, 496. 04	841	248, 429. 78	9	6, 078. 32
California	957	314, 227. 08	249	122, 405. 03	708	191, 822. 05		
San Diego	30	1, 630. 92	8	1, 136. 01	22	494. 91		
Wilmington	19	1, 570. 68	7	889. 64	12	681. 04		
San Francisco	880	306, 178. 34	222	119, 177. 69	658	187, 000. 65		
Humboldt	28	4, 847. 14	12	1, 201. 69	16	3, 645. 45		
Oregon	196	51, 238. 13	148	39, 543. 21	40	5, 721. 94	8	5, 972. 98
Southern Oregon	15	779. 11	13	660. 65	2	118. 46		
Yaquina	11	2, 360. 85	11	2, 360. 85				
Oregon	72	5, 391. 03	40	3, 003. 96	32	2, 387. 07		
Willamette	98	42, 707. 14	84	33, 517. 75	6	3, 216. 41	8	5, 972. 98
Washington—Puget sound	214	69, 538. 93	120	18, 547. 80	93	50, 885. 79	1	105. 34

RECAPITULATION FOR THE TEN YEARS.

1880	1, 124	270, 801. 75	305	110, 414. 61	752	148, 400. 41	67	11, 986. 73
1881	1, 128	284, 425. 60	310	112, 434. 54	748	158, 940. 98	70	13, 050. 08
1882	1, 166	300, 766. 83	326	120, 434. 94	772	167, 351. 44	68	12, 980. 45
1883	1, 169	326, 944. 94	349	134, 435. 75	812	186, 536. 21	8	5, 972. 98
1884	1, 202	334, 188. 81	384	146, 561. 82	818	187, 626. 99		
1885	1, 250	360, 110. 56	402	153, 808. 04	840	200, 329. 54	8	5, 972. 98
1886	1, 253	347, 059. 73	416	156, 320. 30	829	184, 766. 45	8	5, 972. 98
1887	1, 217	355, 814. 58	426	160, 139. 75	783	189, 701. 85	8	5, 972. 98
1888	1, 293	399, 173. 18	459	168, 268. 58	826	224, 931. 62	8	5, 972. 98
1889	1, 367	435, 004. 14	517	180, 496. 04	841	248, 429. 78	9	6, 078. 32

COMPARATIVE STATISTICS—Continued.

TABLE 30.—AGGREGATES AND AVERAGES FOR THE TEN YEARS, 1880–1889—NUMBER, AGGREGATE TONNAGE, AND AVERAGE TONNAGE OF ALL VESSELS REGISTERED AT THE CUSTOMS DISTRICTS OF THE PACIFIC COAST DURING THE TEN YEARS 1880–1889.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Total	1,124	270,801.75	240.93	1,128	284,425.60	252.15	1,166	300,766.83	257.95	1,169	326,944.94	279.68	1,202	334,188.81	278.03
California	884	202,114.30	228.64	868	202,906.59	233.76	887	211,126.02	238.02	884	230,168.26	260.37	875	233,440.22	266.79
San Diego	17	975.26	57.37	21	1,053.94	50.19	27	3,068.17	113.64	22	1,357.96	61.73	14	344.45	24.60
Wilmington										9	1,071.64	119.07	11	1,422.54	129.32
San Francisco	867	201,139.04	231.99	847	201,852.65	238.31	860	208,057.85	241.93	842	225,864.51	268.25	823	227,673.06	276.64
Humboldt										11	1,874.15	170.38	27	4,000.17	148.15
Oregon	135	39,657.63	293.76	143	43,500.79	304.20	156	52,568.56	336.98	145	52,994.69	365.48	163	50,798.48	311.65
Southern Oregon	12	662.09	55.17	12	661.17	55.10	12	660.95	55.08	12	706.15	58.85	11	866.34	78.76
Yaquina													5	1,295.29	259.06
Oregon	46	2,360.79	51.32	44	2,270.04	51.59	50	3,770.80	75.42	46	3,432.44	74.62	57	3,887.45	68.20
Willamette	77	36,634.75	475.78	87	40,569.58	466.32	94	48,136.81	512.09	87	48,856.10	561.56	90	44,749.40	497.22
Washington — Puget sound.	105	29,029.82	276.47	117	38,018.22	324.94	123	37,072.25	301.40	140	43,781.99	312.73	164	49,950.11	304.57

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Total	1,250	360,110.56	288.09	1,253	347,059.73	276.98	1,217	355,814.58	292.37	1,293	399,173.18	308.72	1,367	435,004.14	318.22
California	900	251,142.60	279.05	885	248,132.93	280.38	864	254,092.29	294.09	917	281,131.83	306.58	957	314,227.08	328.35
San Diego	11	380.97	34.63	13	203.00	15.62	21	2,519.64	119.98	31	2,167.62	69.92	30	1,630.92	54.36
Wilmington	12	831.93	69.33	13	919.70	70.75	15	1,737.64	115.84	18	2,598.41	144.36	19	1,570.68	82.67
San Francisco	854	246,876.05	289.08	833	243,413.77	292.21	803	246,699.65	307.22	837	271,063.19	323.85	880	306,178.34	347.93
Humboldt	23	3,053.65	132.77	26	3,596.46	138.33	25	3,135.36	125.41	31	5,302.61	171.05	28	4,847.14	173.11
Oregon	184	59,191.81	321.69	191	56,806.43	297.42	188	52,261.69	277.99	185	53,317.28	288.20	196	51,238.13	261.42
Southern Oregon	14	1,554.19	111.01	14	763.07	54.51	12	554.39	46.20	12	548.10	45.68	15	779.11	51.94
Yaquina	5	1,307.39	261.48	6	1,466.59	234.43	10	3,332.84	333.28	9	2,202.75	244.75	11	2,360.85	214.62
Oregon	66	4,113.55	62.33	68	2,816.20	41.41	65	3,352.49	51.58	67	4,462.93	66.61	72	5,391.03	74.88
Willamette	99	52,216.68	527.44	103	51,820.57	503.11	101	45,021.97	445.76	97	46,103.50	475.29	98	42,707.14	435.79
Washington — Puget sound.	166	49,776.15	299.86	177	42,120.37	237.97	165	49,460.60	299.76	191	64,724.07	338.87	214	69,538.93	324.95

COMPARATIVE STATISTICS—Continued.

TABLE **31.**—AGGREGATES AND AVERAGES FOR THE TEN YEARS, 1880-1889—NUMBER, AGGREGATE TONNAGE, AND AVERAGE TONNAGE OF ALL STEAMERS REGISTERED AT THE CUSTOMS DISTRICTS OF THE PACIFIC COAST DURING THE TEN YEARS 1880-1889.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Total	305	110, 414. 61	362. 02	310	112, 434. 54	362. 69	326	120, 434. 94	369. 43	349	134, 435. 75	385. 20	384	146, 561. 82	381. 67
California	171	75, 965. 35	444. 24	168	75, 336. 06	448. 43	170	75, 385. 21	443. 44	185	87, 293. 86	471. 86	185	97, 377. 34	526. 36
San Diego	2	147. 94	73. 97	2	147. 94	73. 97	5	255. 23	51. 05	5	622. 63	124. 53	4	209. 31	52. 33
Wilmington										3	533. 90	177. 97	3	533. 90	177. 97
San Francisco	169	75, 817. 41	448. 62	166	75, 188. 12	452. 94	165	75, 129. 98	455. 33	174	85, 961. 13	494. 03	169	95, 620. 02	565. 80
Humboldt										3	176. 20	58. 73	9	1, 014. 11	112. 68
Oregon	91	28, 808. 00	316. 57	98	31, 761. 16	324. 09	106	39, 380. 46	371. 51	102	39, 155. 01	383. 87	121	40, 182. 07	332. 08
Southern Oregon	12	662. 09	55. 17	12	661. 17	55. 10	12	660. 95	55. 08	12	706. 15	58. 85	11	866. 34	78. 76
Yaquina													5	1, 295. 29	259. 06
Oregon	17	1, 037. 86	61. 05	18	1, 399. 90	77. 77	20	1, 521. 21	76. 06	22	1, 686. 07	76. 64	30	2, 107. 43	70. 25
Willamette	62	27, 108. 05	437. 23	68	29, 700. 09	436. 77	74	37, 198. 30	502. 68	68	36, 762. 79	540. 63	75	35, 913. 01	478. 84
Washington — Puget sound.	43	5, 641. 26	131. 19	44	5, 337. 32	121. 30	50	5, 669. 27	113. 39	62	7, 986. 88	128. 82	78	9, 002. 41	115. 42

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Total	402	153, 808. 04	382. 61	416	156, 320. 30	375. 77	426	160, 139. 75	375. 91	459	168, 268. 58	366. 60	517	180, 496. 04	349. 12
California	194	101, 757. 24	524. 52	198	103, 591. 98	523. 19	203	111, 049. 41	547. 04	225	115, 976. 96	515. 45	249	122, 405. 03	491. 59
San Diego	2	120. 58	60. 29	2	34. 16	17. 08	4	443. 45	110. 86	7	1, 088. 50	155. 50	8	1, 136. 01	142. 00
Wilmington	3	236. 55	78. 85	3	307. 93	102. 64	3	307. 93	102. 64	5	580. 95	116. 19	7	889. 64	127. 09
San Francisco	180	100, 386. 00	557. 70	183	102, 178. 08	558. 35	187	109, 606. 65	586. 13	204	113, 725. 12	557. 48	222	119, 177. 69	536. 84
Humboldt	9	1, 014. 11	112. 68	10	1, 071. 81	107. 18	9	691. 38	76. 82	9	582. 39	64. 71	12	1, 201. 69	100. 14
Oregon	129	42, 626. 54	330. 44	132	42, 517. 08	322. 10	137	38, 697. 60	282. 46	136	40, 616. 88	298. 65	148	39, 543. 21	267. 18
Southern Oregon	12	1, 417. 39	118. 12	11	608. 31	55. 30	11	538. 08	48. 92	12	548. 10	45. 68	13	660. 65	50. 82
Yaquina	5	1, 307. 39	261. 48	6	1, 406. 59	234. 43	10	3, 332. 84	333. 28	9	2, 202. 75	244. 75	11	2, 360. 85	214. 62
Oregon	35	2, 320. 26	66. 29	34	2, 161. 17	63. 56	33	2, 318. 73	70. 26	34	2, 188. 38	64. 36	40	3, 003. 96	75. 10
Willamette	77	37, 581. 50	488. 07	81	38, 341. 01	473. 35	83	32, 507. 95	391. 66	81	35, 677. 65	440. 46	84	33, 517. 75	399. 02
Washington — Puget sound.	79	9, 424. 26	119. 29	86	10, 211. 24	118. 74	86	10, 392. 74	120. 85	98	11, 674. 74	119. 13	120	18, 547. 80	154. 57

COMPARATIVE STATISTICS—Continued.

TABLE 32.—AGGREGATES AND AVERAGES FOR THE TEN YEARS, 1880-1889—NUMBER, AGGREGATE TONNAGE, AND AVERAGE TONNAGE OF ALL SAILING VESSELS REGISTERED AT THE CUSTOMS DISTRICTS OF THE PACIFIC COAST DURING THE TEN YEARS 1880-1889.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Total	752	148, 400. 41	197. 34	748	158, 940. 98	212. 49	772	167, 351. 44	216. 78	812	186, 536. 21	229. 72	818	187, 626. 99	229. 37
California	652	117, 970. 52	180. 94	639	119, 392. 10	186. 84	656	127, 562. 38	194. 45	699	142, 874. 40	204. 40	690	136, 062. 88	197. 19
San Diego	15	827. 32	55. 15	19	906. 00	47. 68	22	2, 812. 94	127. 86	17	735. 33	43. 25	10	135. 14	13. 51
Wilmington	......	......	......	......	......	......	......	......	......	6	537. 74	89. 62	8	888. 64	111. 08
San Francisco	637	117, 143. 20	183. 90	620	118, 486. 10	191. 11	634	124, 749. 44	196. 77	668	139, 903. 38	209. 44	654	132, 053. 04	201. 92
Humboldt	......	......	......	......	......	......	......	......	......	8	1, 697. 95	212. 24	18	2, 986. 06	165. 89
Oregon	38	7, 041. 33	185. 30	37	6, 906. 41	186. 66	43	8, 386. 08	195. 03	35	7, 866. 70	224. 76	42	10, 616. 41	252. 77
Southern Oregon	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Oregon	29	1, 322. 93	45. 62	26	870. 14	33. 47	30	2, 249. 59	74. 99	24	1, 746. 37	72. 77	27	1, 780. 02	65. 93
Willamette	9	5, 718. 40	635. 38	11	6, 036. 27	548. 75	13	6, 136. 49	472. 04	11	6, 120. 33	556. 39	15	8, 836. 39	589. 09
Washington — Puget sound.	62	23, 388. 56	377. 23	72	32, 642. 47	453. 37	73	31, 402. 98	430. 18	78	35, 795. 11	458. 91	86	40, 947. 70	476. 14

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Total	840	200, 329. 54	238. 49	829	184, 766. 45	222. 88	783	189, 701. 85	242. 28	826	224, 931. 62	272. 31	841	248, 429. 78	295. 40
California	706	149, 385. 36	211. 59	687	144, 540. 95	210. 39	661	143, 042. 88	216. 40	692	165, 154. 87	238. 66	708	191, 822. 05	270. 94
San Diego	9	260. 39	28. 93	11	168. 84	15. 35	17	2, 076. 19	122. 13	24	1, 079. 12	44. 96	22	494. 91	22. 50
Wilmington	9	595. 38	66. 15	10	611. 77	61. 18	12	1, 429. 71	119. 14	13	2, 017. 46	155. 19	12	681. 04	56. 75
San Francisco	674	146, 490. 05	217. 34	650	141, 235. 69	217. 29	616	137, 093. 00	222. 55	633	157, 338. 07	248. 56	658	187, 000. 65	284. 20
Humboldt	14	2, 039. 54	145. 68	16	2, 524. 65	157. 79	16	2, 443. 98	152. 75	22	4, 720. 22	214. 56	16	3, 645. 45	227. 84
Oregon	47	10, 592. 29	225. 37	51	8, 316. 37	163. 07	43	7, 591. 11	176. 54	41	6, 727. 42	164. 08	40	5, 721. 94	143. 05
Southern Oregon	2	136. 80	68. 40	3	154. 76	51. 59	1	16. 31	16. 31	......	......	......	2	118. 46	59. 23
Oregon	31	1, 793. 29	57. 85	34	655. 03	19. 27	32	1, 033. 76	32. 31	33	2, 274. 55	68. 93	32	2, 387. 07	74. 60
Willamette	14	8, 662. 20	618. 73	14	7, 506. 58	536. 18	10	6, 541. 04	654. 10	8	4, 452. 87	556. 61	6	3, 216. 41	536. 07
Washington — Puget sound.	87	40, 351. 89	463. 81	91	31, 909. 13	350. 65	79	39, 067. 86	494. 53	93	53, 049. 33	570. 42	93	50, 885. 79	547. 16

COMPARATIVE STATISTICS—Continued.

TABLE **33.**—AGGREGATES AND AVERAGES FOR THE TEN YEARS, 1880-1889—NUMBER, AGGREGATE TONNAGE, AND AVERAGE TONNAGE OF ALL UNRIGGED CRAFT REGISTERED AT THE CUSTOMS DISTRICTS OF THE PACIFIC COAST DURING THE TEN YEARS 1880-1889.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Total	67	11, 986. 73	178. 91	70	13, 050. 08	186. 43	68	12, 980. 45	190. 89	8	5, 972. 98	746. 62	......	......	......
San Francisco, California.	61	8, 178. 43	134. 07	61	8, 178. 43	134. 07	61	8, 178. 43	134. 07	......	......	......	......	......	......
Willamette, Oregon	6	3, 808. 30	634. 72	8	4, 833. 22	604. 15	7	4, 802. 02	686. 00	8	5, 972. 98	746. 62	......	......	......
Puget sound, Washington.	......	......	......	1	38. 43	38. 43	......	......	......	......	......	......	......	......	......

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.		Number.	Tonnage.	
		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.		Total.	Average.
Total	8	5, 972. 98	746. 62	8	5, 972. 98	746. 62	8	5, 972. 98	746. 62	8	5, 972. 98	746. 62	9	6, 078. 32	675. 37
San Francisco, California.	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Willamette, Oregon	8	5, 972. 98	746. 62	8	5, 972. 98	746. 62	8	5, 972. 98	746. 62	8	5, 972. 98	746. 62	8	5, 972. 98	746. 62
Puget sound, Washington.	......	......	......	......	......	......	......	......	......	......	......	......	1	105. 34	105. 34

TABLE **34.**—FLUCTUATIONS FOR THE TEN YEARS, 1880-1889—AVERAGE ANNUAL NUMBER OF ALL CRAFT AND AVERAGE ANNUAL TONNAGE REGISTERED AT THE CUSTOMS DISTRICTS OF THE PACIFIC COAST DURING THE TEN YEARS 1880-1889, TOGETHER WITH THE INDICATED YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION.

CUSTOMS DISTRICTS.	FLUCTUATIONS IN NUMBER.								FLUCTUATIONS IN TONNAGE.							
	Annual average number of vessels registered.	Highest above average.		Lowest below average.		Closest to average.		Fluctuation in number.	Annual average registered tonnage.	Highest above average.		Lowest below average.		Closest to average.		Fluctuation in tonnage.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Tonnage.	Year.	Tonnage.	Year.	Tonnage.	
Total	1, 217	1889	1, 367	1880	1, 124	1887	1, 217	243	341, 429	1889	435, 004	1880	270, 802	1886	347, 060	164, 202
California	892	1889	957	1887	864	1882	887	93	242, 848	1889	314, 227	1880	202, 114	1886	248, 133	112, 113
San Diego	21	1888	31	1885	11	1881	21	20	1, 370	1882	3, 068	1886	203	1883	1, 358	2, 865
Wilmington	14	1889	19	1883	9	1886	13	10	1, 450	1888	2, 598	1885	832	1884	1, 423	1, 766
San Francisco	845	1889	880	1887	803	1881	847	77	237, 882	1889	306, 178	1880	201, 139	1886	243, 414	105, 039
Humboldt	24	1888	31	1883	11	1887	25	20	3, 687	1888	5, 303	1883	1, 874	1886	3, 596	3, 429
Oregon	169	1889	196	1880	135	1884	163	61	51, 234	1885	59, 192	1880	39, 658	1889	51, 238	19, 534
Southern Oregon	13	1889	15	1884	11	1880	12	4	776	1885	1, 554	1888	548	1889	779	1, 006
Yaquina	8	1889	11	1884	5	1888	9	6	1, 984	1887	3, 333	1884	1, 295	1888	2, 203	2, 038
Oregon	58	1889	72	1881	44	1884	57	28	3, 586	1889	5, 391	1881	2, 270	1883	3, 432	3, 121
Willamette	93	1886	103	1880	77	1882	94	26	45, 682	1885	52, 217	1880	36, 635	1888	46, 104	15, 582
Washington—Puget sound	156	1889	214	1880	105	1884	164	109	47, 347	1889	69, 539	1880	29, 030	1887	49, 461	40, 509

COMPARATIVE STATISTICS—Continued.

TABLE 35.—FLUCTUATIONS FOR THE TEN YEARS, 1880-1889—AVERAGE ANNUAL NUMBER OF STEAMERS AND AVERAGE ANNUAL TONNAGE REGISTERED AT THE CUSTOMS DISTRICTS OF THE PACIFIC COAST DURING THE TEN YEARS 1880-1889, TOGETHER WITH THE INDICATED YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION.

CUSTOMS DISTRICTS.	FLUCTUATIONS IN NUMBER.								FLUCTUATIONS IN TONNAGE.							
	Annual average number of vessels registered.	Highest above average.		Lowest below average.		Closest to average.		Fluctuation in number.	Annual average registered tonnage.	Highest above average.		Lowest below average.		Closest to average.		Fluctuation in tonnage.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Tonnage.	Year.	Tonnage.	Year.	Tonnage.	
Total	389	1889	517	1880	305	1884	384	212	144, 331	1889	180, 496	1880	110, 415	1884	146, 562	70, 081
California	195	1889	249	1881	168	1885	194	81	96, 614	1889	122, 405	1881	75, 336	1884	97, 377	47, 069
San Diego	4	1889	8	1880	2	1884	4	6	421	1889	1, 136	1886	34	1887	443	1, 102
Wilmington	4	1889	7	1883	3	1883	3	4	484	1889	890	1885	237	1883	534	653
San Francisco	182	1889	222	1882	165	1886	183	57	95, 279	1889	119, 178	1882	75, 130	1884	95, 620	44, 048
Humboldt	9	1889	12	1883	3	1884	9	9	822	1889	1, 202	1883	176	1887	691	1, 026
Oregon	120	1889	148	1880	91	1884	121	57	38, 329	1885	42, 627	1880	28, 808	1887	38, 698	13, 819
Southern Oregon	12	1889	13	1884	11	1880	12	2	733	1885	1, 417	1887	538	1883	706	879
Yaquina	8	1889	11	1884	5	1888	9	6	1, 984	1887	3, 333	1884	1, 295	1888	2, 203	2, 038
Oregon	28	1889	40	1880	17	1884	30	23	1, 974	1889	3, 004	1880	1, 038	1884	2, 107	1, 966
Willamette	75	1889	84	1880	62	1884	75	22	34, 431	1886	38, 341	1880	27, 108	1889	33, 518	11, 233
Washington—Puget sound	75	1889	120	1880	43	1884	78	77	9, 389	1889	18, 548	1881	5, 337	1885	9, 424	13, 211

TABLE 36.—FLUCTUATIONS FOR THE TEN YEARS, 1880-1889—AVERAGE ANNUAL NUMBER OF SAILING VESSELS AND AVERAGE ANNUAL TONNAGE REGISTERED AT THE CUSTOMS DISTRICTS OF THE PACIFIC COAST DURING THE TEN YEARS 1880-1889, TOGETHER WITH THE INDICATED YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION.

CUSTOMS DISTRICTS.	FLUCTUATIONS IN NUMBER.								FLUCTUATIONS IN TONNAGE.							
	Annual average number of vessels registered.	Highest above average.		Lowest below average.		Closest to average.		Fluctuation in number.	Annual average registered tonnage.	Highest avove average.		Lowest below average.		Closest to average.		Fluctuation in tonnage.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Tonnage.	Year.	Tonnage.	Year.	Tonnage.	
Total	802	1889	841	1881	748	1883	812	93	189, 702	1889	248, 430	1880	148, 400	1887	189, 702	100, 030
California	679	1889	708	1881	639	1886	687	69	143, 781	1889	191, 822	1880	117, 971	1887	143, 043	73, 851
San Diego	17	1888	24	1885	9	1883	17	15	950	1882	2, 813	1884	135	1881	906	2, 678
Wilmington	10	1888	13	1883	6	1886	10	7	966	1888	2, 017	1883	538	1884	889	1, 479
San Francisco	644	1885	674	1887	616	1886	650	58	140, 149	1889	187, 001	1880	117, 143	1883	139, 903	69, 858
Humboldt	16	1888	22	1883	8	1886	16	14	2, 865	1888	4, 720	1883	1, 698	1884	2, 986	3, 022
Oregon	42	1886	51	1883	35	1884	42	16	7, 977	1884	10, 616	1889	5, 722	1883	7, 867	4, 894
Southern Oregon	2	1886	3	1887	1	1885	2	2	107	1886	155	1887	16	1889	118	139
Oregon	30	1886	34	1883	24	1882	30	10	1, 611	1889	2, 387	1886	655	1883	1, 746	1, 732
Willamette	11	1884	15	1889	6	1881	11	9	6, 323	1884	8, 836	1889	3, 216	1882	6, 136	5, 620
Washington—Puget sound	81	1888	93	1880	62	1887	79	31	37, 944	1888	53, 049	1880	23, 389	1887	39, 068	29, 660

COMPARATIVE STATISTICS—Continued.

TABLE **37.**—FLUCTUATIONS FOR THE TEN YEARS, 1880-1889—AVERAGE ANNUAL NUMBER OF UNRIGGED CRAFT AND AVERAGE ANNUAL TONNAGE REGISTERED AT THE CUSTOMS DISTRICTS OF THE PACIFIC COAST DURING THE TEN YEARS 1880-1889, TOGETHER WITH THE INDICATED YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION.

CUSTOMS DISTRICTS.	FLUCTUATIONS IN NUMBER.								FLUCTUATIONS IN TONNAGE.							
	Annual average number of vessels registered.	Highest above average.		Lowest below average.		Closest to average.		Fluctuation in number.	Annual average registered tonnage.*	Highest above average.		Lowest below average.		Closest to average.		Fluctuation in tonnage.
		Year.	Number.	Year	Number.	Year.	Number.			Year.	Tonnage.	Year.	Tonnage.	Year.	Tonnage.	
Total	28	1881	70	1883	8	1889	9	62	8,218	1881	13,050	1883	5,973	1889	6,078	7,077
San Francisco	61	......	......	......	......	......	......	......	8,178	......	......	......	......	......	......	......
Willamette, Oregon	8	......	......	1880	6	1881	8	2	5,476	1883	5,973	1880	3,808	1883	5,973	2,165
Puget sound, Washington	1	......	......	......	......	......	......	......	72	1889	105	1881	38	1889	105	67

TABLE **38.**—SHIPBUILDING FOR THE TEN YEARS, 1880-1889—NUMBER AND TONNAGE OF ALL STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT BUILT IN THE CUSTOMS DISTRICTS OF THE PACIFIC COAST DURING THE TEN YEARS 1880-1889.

1880.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	41	8,943.04	25	7,642.61	15	937.44	1	362.99
California—San Francisco	18	5,795.16	7	4,948.85	11	846.31	......	......
Oregon	16	2,465.56	13	2,027.40	2	75.17	1	362.99
Southern Oregon	2	56.33	1	5.43	1	50.90	......	......
Oregon	2	46.84	1	22.57	1	24.27	......	......
Willamette	12	2,362.39	11	1,999.40	......	......	1	362.99
Washington—Puget sound	7	682.32	5	666.36	2	15.96	......	......

1881.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	58	11,417.49	21	3,010.41	35	7,382.15	2	1,024.93
California—San Francisco	26	4,555.70	5	1,358.62	21	3,197.08	......	......
Oregon	22	4,330.89	13	1,616.50	7	1,689.46	2	1,024.93
Southern Oregon	1	388.59	......	......	1	388.59	......	......
Oregon	4	303.41	2	280.74	2	22.67	......	......
Willamette	17	3,638.89	11	1,335.76	4	1,278.20	2	1,024.93
Washington—Puget sound	10	2,530.90	3	35.29	7	2,495.61	......	......

1882.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	74	15,770.52	28	6,727.35	46	9,043.17	......	......
California	36	6,997.62	11	3,620.53	25	3,377.09	......	......
San Diego	2	265.90	1	18.56	1	247.34	......	......
San Francisco	34	6,731.72	10	3,601.97	24	3,129.75	......	......
Oregon	20	4,835.71	10	2,699.81	10	2,136.90	......	......
Southern Oregon	6	1,068.29	......	......	6	1,068.29	......	......
Oregon	6	614.32	4	222.86	2	391.46	......	......
Willamette	8	3,153.10	6	2,476.95	2	676.15	......	......
Washington—Puget sound	18	3,937.19	7	407.01	11	3,530.18	......	......

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING FOR THE TEN YEARS, ALL CRAFT, 1880-1889—Continued.

1883.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	91	16, 737. 97	34	4, 019. 17	56	11, 547. 84	1	1, 170. 96
California	52	9, 047. 47	11	2, 408. 96	41	6, 638. 51	....	....
San Diego	1	12. 29	....	....	1	12. 29	....	....
San Francisco	46	8, 168. 09	11	2, 408. 96	35	5, 759. 13	....	....
Humboldt	5	867. 09	....	....	5	867. 09	....	....
Oregon	20	3, 739. 99	14	878. 09	5	1, 690. 94	1	1, 170. 96
Southern Oregon	5	1, 421. 51	1	58. 74	4	1, 362. 77	....	....
Oregon	11	2, 061. 60	9	562. 47	1	328. 17	1	1, 170. 96
Willamette	4	256. 88	4	256. 88	....	....	....	....
Washington—Puget sound	19	3, 950. 51	9	732. 12	10	3, 218. 39	....	....

1884.

Total	84	10, 612. 36	42	5, 865. 99	42	4, 746. 37	....	....
California	39	6, 300. 99	13	3, 963. 79	26	2, 337. 20	....	....
San Diego	3	31. 94	....	....	3	31. 94	....	....
San Francisco	30	5, 037. 04	12	3, 880. 32	18	1, 156. 72	....	....
Humboldt	6	1, 232. 01	1	83. 47	5	1, 148. 54	....	....
Oregon	24	1, 659. 40	15	976. 93	9	682. 47	....	....
Southern Oregon	3	503. 34	1	104. 50	2	398. 84	....	....
Oregon	11	433. 13	6	317. 01	5	116. 12	....	....
Willamette	10	722. 93	8	555. 42	2	167. 51	....	....
Washington—Puget sound	21	2, 651. 97	14	925. 27	7	1, 726. 70	....	....

1885.

Total	73	11, 001. 28	38	8, 867. 37	35	2, 133. 91	....	....
California	37	6, 052. 09	14	4, 764. 02	23	1, 288. 07	....	....
Wilmington	1	29. 64	....	....	1	29. 64	....	....
San Francisco	34	5, 730. 89	14	4, 764. 02	20	966. 87	....	....
Humboldt	2	291. 56	....	....	2	291. 56	....	....
Oregon	23	3, 373. 06	16	3, 075. 35	7	297. 71	....	....
Southern Oregon	5	439. 14	2	208. 91	3	230. 23	....	....
Oregon	8	380. 53	5	347. 61	3	32. 92	....	....
Willamette	10	2, 553. 39	9	2, 518. 83	1	34. 56	....	....
Washington—Puget sound	13	1, 576. 13	8	1, 028. 00	5	548. 13	....	....

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING FOR THE TEN YEARS, ALL CRAFT, 1880-1889—Continued.

1886.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	58	5,913.92	23	3,023.31	35	2,890.61	....	....
California	29	3,084.22	9	2,039.24	20	1,044.98	....	....
San Diego	2	26.12	....	....	2	26.12	....	....
San Francisco	25	2,855.14	8	1,981.54	17	873.60	....	....
Humboldt	2	202.96	1	57.70	1	145.26	....	....
Oregon	16	1,351.49	9	624.86	7	726.63	....	....
Southern Oregon	2	610.16	....	....	2	610.16	....	....
Oregon	5	136.40	1	33.02	4	103.38	....	....
Willamette	9	604.93	8	591.84	1	13.09	....	....
Washington—Puget sound	13	1,478.21	5	359.21	8	1,119.00	....	....

1887.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	71	9,106.24	32	3,750.45	39	5,355.79	....	....
California	36	4,388.04	12	2,241.14	24	2,146.90	....	....
San Diego	1	8.28	....	....	1	8.28	....	....
San Francisco	33	3,758.45	12	2,241.14	21	1,517.31	....	....
Humboldt	2	621.31	....	....	2	621.31	....	....
Oregon	16	1,227.17	14	1,117.48	2	109.69	....	....
Southern Oregon	3	263.10	2	174.27	1	88.83	....	....
Yaquina	1	65.49	1	65.49	....	....	....	....
Oregon	6	341.63	5	320.77	1	20.86	....	....
Willamette	6	556.95	6	556.95	....	....	....	....
Washington—Puget sound	19	3,491.03	6	391.83	13	3,099.20	....	....

1888.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	104	21,956.43	55	12,710.22	48	9,140.87	1	105.34
California	60	11,490.77	28	8,683.04	32	2,807.73	....	....
San Diego	6	793.03	4	745.80	2	47.23	....	....
Wilmington	3	75.24	1	36.48	2	38.76	....	....
San Francisco	47	9,687.31	22	7,891.60	25	1,795.71	....	....
Humboldt	4	935.19	1	9.16	3	926.03	....	....
Oregon	23	4,702.19	17	3,141.59	6	1,560.60	....	....
Southern Oregon	3	651.75	2	154.89	1	496.86	....	....
Yaquina	1	91.56	1	91.56	....	....	....	....
Oregon	10	1,302.33	5	238.59	5	1,063.74	....	....
Willamette	9	2,656.55	9	2,656.55	....	....	....	....
Washington—Puget sound	21	5,763.47	10	885.59	10	4,772.54	1	105.34

COMPARATIVE STATISTICS—Continued.

TABLE 38.—SHIPBUILDING FOR THE TEN YEARS, ALL CRAFT, 1880-1889—Continued.

1889.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	110	17,909.48	71	12,734.30	39	5,175.18	....	....
California	55	9,497.96	34	7,790.70	21	1,707.26	....	....
San Diego	2	38.59	....	....	2	38.59	....	....
San Francisco	48	8,606.65	31	7,551.16	17	1,055.49	....	....
Humboldt	5	852.72	3	239.54	2	613.18	....	....
Oregon	30	4,159.91	21	2,873.36	9	1,286.55	....	....
Southern Oregon	4	1,169.82	....	....	4	1,169.82	....	....
Yaquina	3	220.11	3	220.11	....	....	....	....
Oregon	13	544.42	8	427.69	5	116.73	....	....
Willamette	10	2,225.56	10	2,225.56	....	....	....	....
Washington—Puget sound	25	4,251.61	16	2,070.24	9	2,181.37	....	....

RECAPITULATION FOR THE TEN YEARS.

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		UNRIGGED CRAFT.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total for 10 years	764	129,368.73	369	68,351.18	390	58,353.33	5	2,664.22
1880	41	8,943.04	25	7,642.61	15	937.44	1	362.99
1881	58	11,417.49	21	3,010.41	35	7,382.15	2	1,024.93
1882	74	15,770.52	28	6,727.35	46	9,043.17	....	....
1883	91	16,737.97	34	4,019.17	56	11,547.84	1	1,170.96
1884	84	10,612.36	42	5,865.99	42	4,746.37	....	....
1885	73	11,001.28	38	8,867.37	35	2,133.91	....	....
1886	58	5,913.92	23	3,023.31	35	2,890.61	....	....
1887	71	9,106.24	32	3,750.45	39	5,355.79	....	....
1888	104	21,956.43	55	12,710.22	48	9,140.87	1	105.34
1889	110	17.909.48	71	12,734.30	39	5,175.18	....	....

COMPARATIVE STATISTICS—Continued.

TABLE 39.—SHIPBUILDING FOR THE TEN YEARS, 1880-1889—NUMBER AND TONNAGE OF ALL STEAMERS BUILT IN EACH CUSTOMS DISTRICT OF THE PACIFIC COAST DURING THE TEN YEARS 1880-1889, CLASSIFIED AS PROPELLERS AND SIDE-WHEEL AND STERN-WHEEL STEAMERS.

CUSTOMS DISTRICTS.	METHODS OF PROPULSION.							
	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1880.								
Total	25	7,642.61	10	402.48	9	5,804.35	6	1,435.78
California—San Francisco	7	4,948.85	4	264.26	2	4,630.01	1	54.58
Oregon	13	2,027.40	4	75.52	6	701.68	3	1,250.20
Southern Oregon	1	5.43	1	5.43				
Oregon	1	22.57	1	22.57				
Willamette	11	1,999.40	2	47.52	6	701.68	3	1,250.20
Washington—Puget sound	5	666.36	2	62.70	1	472.66	2	131.00
1881.								
Total	21	3,010.41	10	887.12	4	325.06	7	1,798.23
California—San Francisco	5	1,358.62	3	422.08			2	936.54
Oregon	13	1,616.50	4	429.75	4	325.06	5	861.69
Oregon	2	280.74	1	23.06			1	257.68
Willamette	11	1,335.76	3	406.69	4	325.06	4	604.01
Washington—Puget sound	3	35.29	3	35.29				
1882.								
Total	28	6,727.35	15	3,915.90	3	253.10	10	2,558.35
California	11	3,620.53	8	3,442.91	2	163.33	1	14.29
San Diego	1	18.56			1	18.56		
San Francisco	10	3,601.97	8	3,442.91	1	144.77	1	14.29
Oregon	10	2,699.81	3	286.09	1	89.77	6	2,323.95
Oregon	4	222.86	2	25.38			2	197.48
Willamette	6	2,476.95	1	260.71	1	89.77	4	2,126.47
Washington—Puget sound	7	407.01	4	186.90			3	220.11
1883.								
Total	34	4,019.17	27	3,097.03			7	922.14
California—San Francisco	11	2,408.96	10	2,375.23			1	33.73
Oregon	14	878.09	11	438.23			3	439.86
Southern Oregon	1	58.74	1	58.74				
Oregon	9	562.47	7	290.29			2	272.18
Willamette	4	256.88	3	89.20			1	167.68
Washington—Puget sound	9	732.12	6	283.57			3	448.55

COMPARATIVE STATISTICS—Continued.

TABLE 39.—SHIPBUILDING FOR THE TEN YEARS, STEAMERS, 1880-1889—Continued.

1884.

CUSTOMS DISTRICTS.	METHODS OF PROPULSION.							
	All steamers.		Propeller.		Side-wheel.		Stern-wheel.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	42	5, 865. 99	24	1, 428. 00	6	2, 583. 37	12	1, 854. 62
California	13	3, 963. 79	7	860. 66	2	2, 182. 37	4	920. 76
San Francisco	12	3, 880. 32	7	860. 66	2	2, 182. 37	3	837. 29
Humboldt	1	83. 47	....	....	....	....	1	83. 47
Oregon	15	976. 93	10	370. 06	4	401. 00	1	205. 87
Southern Oregon	1	104. 50	1	104. 50	....	....	....	....
Oregon	6	317. 01	5	111. 14	....	....	1	205. 87
Willamette	8	555. 42	4	154. 42	4	401. 00	....	....
Washington—Puget sound	14	925. 27	7	197. 28	....	....	7	727. 99

1885.

CUSTOMS DISTRICTS.	All steamers. Number.	All steamers. Tonnage.	Propeller. Number.	Propeller. Tonnage.	Side-wheel. Number.	Side-wheel. Tonnage.	Stern-wheel. Number.	Stern-wheel. Tonnage.
Total	38	8, 867. 37	22	3, 219. 04	5	2, 998. 51	11	2, 649. 82
California—San Francisco	14	4, 764. 02	8	1, 773. 89	1	1, 257. 14	5	1, 732. 99
Oregon	16	3, 075. 35	10	978. 35	3	1, 685. 64	3	411. 36
Southern Oregon	2	208. 91	2	208. 91	....	....	....	....
Oregon	5	347. 61	4	317. 08	....	....	1	30. 53
Willamette	9	2, 518. 83	4	452. 36	3	1, 685. 64	2	380. 83
Washington—Puget sound	8	1, 028. 00	4	466. 80	1	55. 73	3	505. 47

1886.

CUSTOMS DISTRICTS.	All steamers. Number.	All steamers. Tonnage.	Propeller. Number.	Propeller. Tonnage.	Side-wheel. Number.	Side-wheel. Tonnage.	Stern-wheel. Number.	Stern-wheel. Tonnage.
Total	23	3, 023. 31	13	1, 145. 71	....	....	10	1, 877. 60
California	9	2, 039. 24	4	818. 74	....	....	5	1, 220. 50
San Francisco	8	1, 981. 54	4	818. 74	....	....	4	1, 162. 80
Humboldt	1	57. 70	....	....	....	....	1	57. 70
Oregon	9	624. 86	6	155. 88	....	....	3	468. 98
Oregon	1	33. 02	1	33. 02	....	....	....	....
Willamette	8	591. 84	5	122. 86	....	....	3	468. 98
Washington—Puget sound	5	359. 21	3	171. 09	....	....	2	188. 12

1887.

CUSTOMS DISTRICTS.	All steamers. Number.	All steamers. Tonnage.	Propeller. Number.	Propeller. Tonnage.	Side-wheel. Number.	Side-wheel. Tonnage.	Stern-wheel. Number.	Stern-wheel. Tonnage.
Total	32	3, 750. 45	26	2, 720. 48	2	347. 62	4	682. 35
California—San Francisco	12	2. 241. 14	11	1, 932. 60	1	308. 54	....	....
Oregon	14	1, 117. 48	11	621. 26	1	39. 08	2	457. 14
Southern Oregon	2	174. 27	2	174. 27	....	....	....	....
Yaquina	1	65. 49	1	65. 49	....	....	....	....
Oregon	5	320. 77	5	320. 77	....	....	....	....
Willamette	6	556. 95	3	60. 73	1	39. 08	2	457. 14
Washington—Puget sound	6	391. 83	4	166. 62	....	....	2	225. 21

COMPARATIVE STATISTICS—Continued.

TABLE 39.—SHIPBUILDING FOR THE TEN YEARS, STEAMERS, 1880–1889—Continued.

1888.

CUSTOMS DISTRICTS.	METHODS OF PROPULSION.							
	All steamers.		Propeller.		Side-wheel.		Stern-wheel	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	55	12,710.22	43	7,749.66	3	2,427.60	9	2,532.96
California	28	8,683.04	27	6,668.59	1	2,014.45	....	....
San Diego	4	745.80	4	745.80	....	....	....	....
Wilmington	1	36.48	1	36.48	....	....	....	....
San Francisco	22	7,891.60	21	5,877.15	1	2,014.45	....	....
Humboldt	1	9.16	1	9.16	....	....	....	....
Oregon	17	3,141.59	9	710.48	1	316.46	7	2,114.65
Southern Oregon	2	154.89	2	154.89	....	....	....	....
Yaquina	1	91.56	1	91.56	....	....	....	....
Oregon	5	238.59	3	120.21	....	....	2	118.38
Willamette	9	2,656.55	3	343.82	1	316.46	5	1.996.27
Washington—Puget sound	10	885.59	7	370.59	1	96.69	2	418.31

1889.

CUSTOMS DISTRICTS.	All steamers. Number.	All steamers. Tonnage.	Propeller. Number.	Propeller. Tonnage.	Side-wheel. Number.	Side-wheel. Tonnage.	Stern-wheel Number.	Stern-wheel Tonnage.
Total	71	12,734.30	51	7,163.33	5	1,393.61	15	4,177.36
California	34	7,790.70	27	5,914.72	1	119.72	6	1,756.26
San Francisco	31	7,551.16	26	5,904.55	1	119.72	4	1,526.89
Humboldt	3	239.54	1	10.17	....	....	2	229.37
Oregon	21	2,873.36	15	701.49	1	659.41	5	1,512.46
Yaquina	3	220.11	3	220.11	....	....	....	....
Oregon	8	427.69	7	329.62	....	....	1	98.07
Willamette	10	2,225.56	5	151.76	1	659.41	4	1,414.39
Washington—Puget sound	16	2,070.24	9	547.12	[illegible]	614.48	4	908.64

RECAPITULATION FOR THE TEN YEARS.

	All steamers. Number.	All steamers. Tonnage.	Propeller. Number.	Propeller. Tonnage.	Side-wheel. Number.	Side-wheel. Tonnage.	Stern-wheel Number.	Stern-wheel Tonnage.
Total for 10 years	369	68,351.18	241	31,728.75	37	16,133.22	91	20,489.21
1880	25	7,642.61	10	402.48	9	5,804.35	6	1,435.78
1881	21	3,010.41	10	887.12	4	325.06	7	1,798.23
1882	28	6,727.35	15	3,915.90	3	253.10	10	2,558.35
1883	34	4,019.17	27	3,097.03	....	....	7	922.14
1884	42	5,865.99	24	1,428.00	6	2,583.37	12	1,854.62
1885	38	8,867.37	22	3,219.04	5	2,998.51	11	2,649.82
1886	23	3,023.31	13	1,145.71	....	....	10	1,877.60
1887	32	3,750.45	26	2,720.48	2	347.62	4	682.35
1888	55	12,710.22	43	7,749.66	3	2,427.60	9	2,532.96
1889	71	12,734.30	51	7,163.33	5	1,393.61	15	4,177.36

CONGRESSIONAL APPROPRIATIONS.

TABLE 40.—CONGRESSIONAL APPROPRIATIONS FOR THE SURVEY, IMPROVEMENT, AND MAINTENANCE OF RIVERS AND HARBORS ON THE PACIFIC COAST, BY PERIODS, FROM THE EARLIEST DATE OF APPROPRIATION TO 1890, INCLUSIVE, BY LOCALITIES.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress September 19, 1890.	Total appropriations up to date.
Total	1852	$2,315,000	$5,527,200	$2,122,600	$9,964,800
General expenses and surveys	1866	50,000			50,000
California	1852	1,158,000	2,283,750	596,500	4,038,250
Oregon	1866	1,107,000	3,164,950	1,493,100	5,765,050
Washington	1880		78,500	33,000	111,500
California:					
Humboldt harbor	1881		80,000		80,000
	1884		62,500		62,500
	1886		75,000		75,000
	1888		125,000		125,000
	1890			80,000	80,000
Total for Humboldt harbor	1881		342,500	80,000	422,500
Oakland harbor	1874	415,000			415,000
	1880		120,000		120,000
	1882		200,000		200,000
	1884		139,600		139,600
	1886		60,000		60,000
	1888		350,000		350,000
	1890			250,000	250,000
Total for Oakland harbor	1874	415,000	869,600	250,000	1,534,600
Petaluma river	1880		16,000		16,000
	1882		14,000		14,000
	1888		2,000		2,000
	1890			4,000	4,000
Total for Petaluma river	1880		32,000	4,000	36,000
Sacramento and Feather rivers	1875	50,000			50,000
	1880		45,000		45,000
	1881		60,000		60,000
	1882		250,000		250,000
	1884		40,000		40,000
	1888		20,000		20,000
	1890			30,000	30,000
Total for Sacramento and Feather rivers	1875	50,000	415,000	30,000	495,000
San Diego harbor and river (survey of San Diego and Newport)	1852	111,000			111,000
	1886		5,000		5,000
	1888		1,000		1,000
	1890			60,500	60,500
Total for San Diego harbor and river	1852	111,000	6,000	60,500	177,500
San Francisco harbor	1872	75,000			75,000
	1886		11,000		11,000
Total for San Francisco harbor	1872	75,000	11,000		86,000
San Joaquin river	1876	20,000			20,000
	1880		20,000		20,000
	1881		80,000		80,000
	1884		20,000		20,000
	1886		18,750		18,750
	1888		25,000		25,000
	1890			75,000	75,000
Total for San Joaquin river	1876	20,000	163,750	75,000	258,750
San Luis Obispo harbor	1888		25,000		25,000
	1890			40,000	40,000
Total for San Luis Obispo harbor	1888		25,000	40,000	65,000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 40.—APPROPRIATIONS FOR PACIFIC COAST, BY LOCALITIES—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress September 19, 1890.	Total appropriations up to date.
California—Continued.					
Wilmington harbor	1879	$487,000			$487,000
	1880		$35,000		35,000
	1881		33,000		33,000
	1882		100,000		100,000
	1884		50,000		50,000
	1886		75,000		75,000
	1888		90,000		90,000
	1890			$34,000	34,000
Total for Wilmington harbor	1879	487,000	383,000	34,000	904,000
Mokelumne river	1884		8,500		8,500
	1886		2,500		2,500
	1888		2,000		2,000
Total for Mokelumne river	1884		13,000		13,000
Napa river	1888		7,500		7,500
	1890			10,000	10,000
Total for Napa river	1888		7,500	10,000	17,500
Redwood harbor	1884		3,000		3,000
	1886		5,000		5,000
	1888		7,400		7,400
Deep water harbor survey ($5,000)	1890			13,000	13,000
Total for Redwood harbor	1884		15,400	13,000	28,400
Total for Humboldt harbor	1881		342,500	80,000	422,500
Total for Oakland harbor	1874	415,000	869,600	250,000	1,534,600
Total for Petaluma river	1880		32,000	4,000	36,000
Total for Sacramento and Feather rivers	1875	50,000	415,000	30,000	495,000
Total for San Diego harbor and river	1852	111,000	6,000	60,500	177,500
Total for San Francisco harbor	1872	75,000	11,000		86,000
Total for San Joaquin river	1876	20,000	163,750	75,000	258,750
Total for San Luis Obispo harbor	1888		25,000	40,000	65,000
Total for Wilmington harbor	1879	487,000	383,000	34,000	904,000
Total for Mokelumne river	1884		13,000		13,000
Total for Napa river	1888		7,500	10,000	17,500
Total for Redwood harbor	1884		15,400	13,000	28,400
Total for California	1852	1,158,000	2,283,750	596,500	4,038,250
Oregon:					
Coos bay	1879	40,000			40,000
	1881		90,000		90,000
	1886		33,750		33,750
	1888		50,000		50,000
	1890			125,000	125,000
Total for Coos bay	1879	40,000	173,750	125,000	338,750
Willamette (upper) and Yamhill	1871	84,500			84,500
	1880		12,000		12,000
	1881		15,000		15,000
	1882		5,000		5,000
	1884		10,000		10,000
	1886		10,000		10,000
	1888		29,000		29,000
	1890			11,000	11,000
Total for Willamette and Yamhill	1871	84,500	81,000	11,000	176,500

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 40.—APPROPRIATIONS FOR PACIFIC COAST, BY LOCALITIES—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress September 19, 1890.	Total Appropriations up to date.
Oregon—Continued.					
Willamette (lower) and Columbia	1866	$300,000			$300,000
	1880		$45,000		45,000
	1881		45,000		45,000
	1882		100,000		100,000
	1884		100,000		100,000
	1886		75,000		75,000
	1888		100,000		100,000
	1890			$100,000	100,000
Total for Willamette and Columbia	1866	300,000	465,000	100,000	865,000
Total for Willamette and Yamhill	1871	84,500	81,000	11,000	176,500
Total for Willamette, Columbia, and Yamhill	1866	384,500	546,000	111,000	1,041,500
Columbia (upper) and Snake rivers	1872	160,000			160,000
	1880		15,000		15,000
	1881		15,000		15,000
	1882		6,000		6,000
	1884		20,000		20,000
	1886		10,000		10,000
	1888		10,000		10,000
	1890			90,000	90,000
Total for Columbia and Snake rivers	1872	160,000	76,000	90,000	326,000
Columbia at Cascades	1876	340,000			340,000
	1880		200,000		200,000
	1882		265,000		265,000
	1884		150,000		150,000
	1886		187,000		187,000
	1888		300,000		300,000
	1890			435,000	435,000
Total for Columbia at Cascades	1876	340,000	1,102,000	435,000	1,877,000
Lower Columbia and tributaries	1882		500		500
	1884		2,000		2,000
	1888		2,500		2,500
Total for lower Columbia and tributaries	1882		5,000		5,000
Lower Columbia at mouth	1878	10,000			10,000
	1882		7,500		7,500
	1884		100,000		100,000
	1886		187,500		187,500
	1888		500,000		500,000
	1890			475,000	475,000
Total for lower Columbia at mouth	1878	10,000	795,000	475,000	1,280,000
Total for upper Columbia and Snake rivers	1872	160,000	76,000	90,000	326,000
Total for Columbia at Cascades	1876	340,000	1,102,000	435,000	1,877,000
Total for lower Columbia and tributaries	1882		5,000		5,000
Total for Columbia and tributaries	1872	510,000	1,978,000	1,000,000	3,488,000
Yaquina bay	1880		40,000		40,000
	1881		10,000		10,000
	1882		60,000		60,000
	1884		50,000		50,000
	1886		75,000		75,000
	1888		150,000		150,000
	1890			165,000	165,000
Total for Yaquina bay	1880		385,000	165,000	550,000
Tillamook bay	1888		5,200		5,200
	1889			500	500
Total for Tillamook bay	1888		5,200	500	5,700
Nehalem bay and river	1890			10,000	10,000
Harbor of refuge at Port Orford	1875	150,000			150,000

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 40.—APPROPRIATIONS FOR PACIFIC COAST, BY LOCALITIES—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive	Appropriations by act of Congress September 19, 1890.	Total appropriations up to date.
Oregon—Continued.					
Coquille river	1880		$30,000		$30,000
	1886		20,000		20,000
	1888		25,000		25,000
	1890			$30,000	30,000
Total for Coquille river	1880		75,000	30,000	105,000
Umpqua river	1871	$22,500			22,500
	1888		2,000		2,000
Total for Umpqua river	1871	22,500	2,000		24,500
Siuslaw river	1890			50,000	50,000
Youngs and Klaskuine rivers	1890			1,600	1,600
Total for Coos bay	1879	40,000	173,750	125,000	338,750
Total for Willamette, Columbia, and Yamhill	1866	384,500	546,000	111,000	1,041,500
Total for Columbia and tributaries	1872	510,000	1,978,000	1,000,000	3,488,000
Total for Yaquina bay	1880		385,000	165,000	550,000
Total for Tillamook bay	1888		5,200	500	5,700
Total for Nehalem bay and river	1890			10,000	10,000
Total for harbor of refuge at Port Orford	1879	150,000			150,000
Total for Coquille river	1880		75,000	30,000	105,000
Total for Umpqua river	1871	22,500	2,000		24,500
Total for Siuslaw	1890			50,000	50,000
Total for Oregon	1866	1,107,000	3,164,950	1,493,100	5,765,050
Washington:					
Cowlitz river	1880		2,000		2,000
	1881		1,000		1,000
	1882		1,000		1,000
	1884		2,000		2,000
	1886		2,000		2,000
	1888		3,000		3,000
	1890			8,000	8,000
Total for Cowlitz river	1880		11,000	8,000	19,000
Tributaries:					
Skagit river	1880		2,500		2,500
Skagit and Snohomish rivers	1882		20,000		20,000
Stillaguamish, Skagit, and Nooksachk rivers	1884		10,000		10,000
Snohomish and Nooksachk rivers	1886		10,000		10,000
Skagit, Snohomish, and Nooksachk rivers	1888		15,000		15,000
For all rivers	1890			12,000	12,000
Total for tributaries	1880		57,500	12,000	69,500
Total for Cowlitz river	1880		11,000	8,000	19,000
Total for Cowlitz river and tributaries	1880		68,500	20,000	88,500
Chehalis river	1882		3,000		3,000
	1884		5,000		5,000
	1888		2,000		2,000
	1890			3,000	3,000
Total for Chehalis river	1882		10,000	3,000	13,000
Canal from Lake Union to Puget sound	1890			10,000	10,000
Total for Cowlitz river and tributaries	1880		68,500	20,000	88,500
Total for Chehalis river	1882		10,000	3,000	13,000
Total for Washington	1880		78,500	33,000	111,500

TRANSPORTATION ON THE GREAT LAKES.

[WITH AN ADDENDUM REPORT ON LAKE CHAMPLAIN.]

TRANSPORTATION ON THE GREAT LAKES.

[WITH AN ADDENDUM REPORT ON LAKE CHAMPLAIN.]

BY THOMAS J. VIVIAN.

The Great Lakes, from which statistics of transportation are presented in the accompanying report, not only constitute one of the grandest geographical features of the North American continent, but they also afford the largest system of deep water inland navigation on the globe, containing as they do more than one-half its area of fresh water. Their combined area is 95,060 square miles, Lake Superior having 31,200, Lake Michigan 22,450, and Lakes Huron and St. Clair 24,210 square miles of surface. In the order of their topographical relationship, and considering them as vast expansions of the upper waters of the St. Lawrence river, they lie, beginning at the northwest, in the following order: Superior, Michigan, Huron, St. Clair, Erie, and Ontario. Lying in a general direction east and west, between the 41st and 47th parallels, the system extends from tidewater on the St. Lawrence and (including the Erie canal) from tidewater at New York 1,400 miles into the heart of the continent, the head of Lake Superior and the St. Lawrence tidewater being on the northernmost parallel, with Chicago and New York on the southern. The western extremity of the system is 1,700 miles only from the waters of the Pacific, and for one-half the distance between the two oceans these waters divide the Dominion from the Great Republic. The range of this fresh water system, it will be observed, is entirely within the limits of the north temperate zone, on the line on which population most freely moves westward, where final settlement is most compact, and where the climatic conditions insure the largest returns to capital and labor.

LEVELS AND WATERSHEDS.

Erie, Huron, and Michigan are nearly on the same level, the extreme difference between the first and the last named being only about 9 feet, while Superior is only 20 feet higher than Michigan, or 29 feet above Erie. In referring to the data of the levels of the Great Lakes in the chapter entitled "The physical features of the United States," the compiler of the "Statistical Atlas" for the Ninth Census says:

> The divide between the Great Lakes and the waters flowing into the Mississippi and its tributaries is everywhere low, and at the lower end of Lake Michigan is so much so that only a small amount of excavation has been required to cause the waters which formerly flowed into the lake to run toward the Gulf of Mexico (via the Mississippi river).

The only great change of level between any two of the lakes is that which exists between Lake Ontario and Lake Erie, the former being 326 feet lower than the latter, about half the descent from one to the other being made in that single plunge known as the Falls of Niagara.

To what has been said may be added the geographical fact that 150 miles northwest of Duluth are the fountains of 3 of the greatest drainage systems of the continent, if not of the world, the physical conditions being such as to send flowing water northward into the ocean through Hudson bay, southward to the ocean through the Mississippi valley and the Gulf of Mexico, and eastward to the ocean through the lakes and St. Lawrence river.

The north drainage system has no traffic practicability; the commercial importance of that flowing southward is treated of in the chapter of this volume entitled "Transportation on the rivers of the Mississippi valley"; while the present chapter will show both the practicability and importance of the east drainage system.

Most of the preceding facts and figures, and many others that have not been referred to, will be found conveniently tabulated in the following statement:

LAKES.	Area of water surface (square miles).	Area of watershed (square miles).	Aggregate area of basin (square miles).	Elevation of mean surface above surface level (feet).	Maximum depth (feet).	Deepest point below surface level (feet).	Mean annual rain and snow fall (inches).	Average discharge at outlets (cubic feet).
Total	95,060	168,700	263,760	[a]516.8	[a]755	[a]339	31	[a]219,000
Lake Ontario	7,240	21,600	28,840	246.6	739	491	34	300,000
Lake Erie	9,960	22,700	32,660	572.9	210	....	34	265,000
Lakes Huron and St. Clair	24,210	35,100	59,310	581.3	750	169	32	225,000
Lake Michigan	22,450	37,700	60,150	581.3	870	289	30	....
Lake Superior	31,200	51,600	82,800	601.8	1,008	406	29	86,000

[a] Average.

IMPORTANCE OF SITUATION.

Into the causes of the commercial importance of the Great Lakes it is scarcely the province of this article to enter. They constitute an accepted fact to every one at all acquainted with the geography and resources of this country, while the accompanying map will serve to indicate the extraordinary extent, productive power, and trade possibilities of the territory which is tributary to this greatest of all lacustrine systems. Debouching on the great lakes lie the states of Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, and New York, 8 empires embracing 416,360 square miles, which according to the present census have a population of 26,029,533; which contain the commercial metropoli of the land; whose products and demands are almost illimitable, and whose wealth is the moving financial factor of the nation. Of course there is no justifiable inference that all this population, all this producing power, all these needs, financial dictatorship, and commercial weight are tributary to the traffic of the lakes, but the fact remains that these states reach to the water's edge of either Superior, Michigan, Huron, Erie, or Ontario, and that while they are not tributary to the lakes they certainly contribute to the volume of their trade and to their importance as water ways. While this report, too, deals only with the American commerce of the lakes, it must not be forgotten that with but few exceptions they are bounded on the north by the dominion of Canada, and that the traffic of the ports along the northern shores is steadily growing. It will not be inappropriate to say here that the paramount question relating to the lake marine to-day is the construction of the so-called "20-foot channel"; for, while the great lakes are deep enough for any fleet, the connecting rivers have shoal places which seriously limit the draft of vessels passing through them. The "20-foot channel" contemplates the provision of a continuous passage of that depth through the connecting waters between Chicago, Duluth, and Buffalo, the cost of which work was estimated by General O. M. Poe to be $2,379,058, these figures of course being outside of the then authorized improvements.

EARLY RECORDS.

It is a matter of history that in 1534 Jacques Cartier, a French navigator, acting under a commission from Francis I, sailed through the straits of Belle Isle and up the St. Lawrence; discovered Canada; landed at a point where is now situated Montreal, and took possession of this new territory in the name of the king of France. From 1603 to 1615 Samuel De Champlain, another French voyager, extended these discoveries and became the first governor of the French settlements in lower Canada. He explored Lake Champlain, gave to it his name, commenced a settlement at Quebec, and extended his explorations as far west as Lake Huron. Up to 1678 a regular sailing vessel had not been placed on the lakes, but in November of that year La Salle and Father Hennepin set sail on a schooner of 10 tons burden, which they had launched at a point near the present city of Kingston, Canada, out on Lake Ontario, and as they were unable to navigate beyond the mouth of the Niagara river, they continued their journey by land. In May, 1679, they launched the Griffin, the first sailing vessel to navigate the upper lakes, and in September, on their voyage westward, reached Green bay. The Griffin, laden with furs, was lost on the return trip, La Salle and Father Hennepin having continued their exploration to the Illinois and Mississippi rivers. From 1700 until 1756 the construction and navigation of sailing vessels was largely, if not entirely, confined to Lake Ontario.

In 1759 the English commenced to build and navigate sailing vessels upon lakes Erie and Ontario. Two sloops were launched at Oswego in 1760 named the Oswego and the Ontario, and about the same time a sloop and schooner, each of 60 tons burden, were built, while at the conquest of Canada in 1763 the English fleet was increased by the addition of the French merchant and whale vessels which then passed into the victor's possession.

Up to the time of the American Revolution there was little increase in the lake shipping, but from that time the commerce of Lake Ontario increased, and up to 1800 it exceeded the commerce of all the other lakes, although the first American steamer upon Lake Erie was built at Erie, Pennsylvania, in 1797.

Before entering upon a consideration of the lake traffic of to-day it will be well to look back for a short time to the beginnings of the trade and at the initial steps in the development of the resources of the circumjacent territory.

One of the chapters of the volume on transportation issued by the Tenth Census was entitled "History of Steam Navigation in the United States", and from that portion which treats of the Lakes the following extracts are drawn:

> Previous to the war of 1812 quite a flourishing commerce was carried on upon Lake Ontario by sailing craft, but it was not till 1816 that the side-wheel steamer Ontario was built at Sacketts Harbor, going into service in April of the following year. This was the first steamer on the American side, the Frontenac coming out at about the same time on the Canadian side. The Ontario measured 231.57 tons, and had beam engines, 34-inch cylinders, of 4-foot stroke. She was broken up in 1832. The second steamer * * * was the Walk-in-the-water, which was launched at Black Rock, New York, in 1818. She was of 342 tons burden, and had low pressure engines. She arrived at Detroit August 22, 1818, on her first trip, and afterward traded as far as Mackinaw, Michigan, and was finally wrecked on the night of November 1, 1818, at Buffalo, New York. The Sophia, of 49.70 tons, was also built at Sacketts Harbor in 1818, so that up to 1820 there had been built only 4 steamers on the Lakes, including 1 steamer of 208.57 tons, built on Lake Champlain, as against 71, measuring 14,207.53 tons, on western rivers [those of the Mississippi valley], and 52, measuring 10,564.43 tons on the Atlantic coast. Within the next decade there had been built 8 steamers on the Lakes. The Superior, measuring 346.38 tons, came out at Buffalo in 1822; the Martha Ogden, 48.63 tons, at Sacketts Harbor in the following year, and the Pioneer, measuring 124.67 tons, at Buffalo in 1825, followed in 1826 by the Niagara, of 156.92 tons, the Henry Clay, of 301 tons, and at Cleveland by the Enterprise, measuring 219 tons, the William Penn, at Erie, measuring 214.71 tons, and 1 small craft of 93.82 tons, making 1,505.13 for the decade. * * * The steamer Sheldon Thompson, of 241 tons, built in 1829, made the first trip from Lake Erie to Chicago in 1832. She took up soldiers for the Black Hawk war. * * * The first steamer that arrived at Saginaw was the Governor Marcy, of 161 tons, commanded by Captain R. G. McKenzie. She went upon a regular route to that port about the year 1837. * * *
>
> SHIPBUILDING IN THE FORTIES.
>
> The first propeller built on the Lakes was the Vandalia, a sloop-rigged craft of about 138 tons. She was launched at Oswego in 1841. She was followed by the Oswego, of 150 tons, in 1842. In 1843 there were 7 propellers built at various points, as follows: The Hercules, 272 tons, at Buffalo; the Samson, 250 tons, at Perrysburg; the Emigrant, 275 tons, at Cleveland; the Racine, 150 tons, at Oswego; the New York, 150 tons, at Oswego; the Chicago, 150 tons, at Oswego; the Independence, 262 tons, at Chicago. In 1844 the Porter, of 310 tons, was built at Buffalo, and in 1845 the Syracuse came out at Oswego; the Princeton at Perrysburg, and the Phœnix at Cleveland. * * * The service of what is now known as the "river tugs" was inaugurated in 1845 by the side-wheel steamer Romeo, of 180 tons. She was followed by the Tecumseh, the Little Erie, the Telegraph No. 2, and the propeller Odd Fellow, in 1848. This service is now performed by a class of powerful tugs, that are used to tow sailing vessels through Detroit river, and for wrecking purposes. * * * Up to 1850 there had been built on the Lakes 50 propellers measuring 16,427 tons. * * * In 1855 the steam inspection service reported the number of steamers on the northern lakes as follows: licensed steamers, 128, measuring 68,089 tons, and unlicensed steamers, 115, measuring 21,252 tons. The next authentic statement of this tonnage was by the register of the Treasury in 1870, when 642 steamers, measuring 142,973.09 tons, were reported.

The reader who is curious to closely follow the growth of the lake fleet after the last date given in the preceding review up to the present time can do so without delay by referring to Tables 24 to 32 inclusive, or by turning to that part of this text wherein the subject is treated of under the head of "Comparative statistics."

PLAN OF THE TABLES.

For the presentation of the statistical results of the investigation by the Eleventh Census into the industry of Transportation on the Great Lakes and St. Lawrence river 33 tables have been prepared, their number and titles being as follows:

Equipment, occupation, and construction:
- Table 1.—Equipment of fleets in general.
- Table 2.—Equipment of fleets, by classes.
- Table 3.—Percentages of tonnage and valuation.
- Table 4.—Occupation, by class groups.
- Table 5.—Construction, by localities.
- Table 6.—Construction, by materials.

Traffic operations:
- Table 7.—Freight movement in general, by lakes.
- Table 8.—Freight movement in general, by principal ports.
- Table 9.—Freight movement in general (summarized).
- Table 10.—Freight receipts, by extended list of commodities.
- Table 11.—Freight shipments, by extended list of commodities.
- Table 12.—Freight movement of combined receipts and shipments, by extended list of commodities.
- Table 13.—Total freight movement, by extended list of commodities.
- Table 14.—Freight movement of unclassified commodities (A).
- Table 15.—Freight movement of unclassified commodities (B).
- Table 16.—Freight values.
- Table 17.—Freight movement, by cargo tonnage.
- Table 18.—Passenger traffic.

Earnings and expense accounts:
- Table 19.—Financial account in general.
- Table 20.—Expense account in detail.
- Table 21.—Employés and wages, by ports.
- Table 22.—Employés and wages, by lake totals.
- Table 23.—Fuel account.

Comparative statistics:
- Table 24.—Steamers, by classes, in 1880 and 1889.
- Table 25.—Expense accounts in 1880 and 1889.
- Table 26.—Crews and wages in 1880 and 1889.
- Table 27.—Traffic in 1880 and 1889.
- Table 28.—Fleets for the 10 years, 1880–1889.
- Table 29.—Vessel tonnages for the 10 years, 1880–1889.
- Table 30.—Tonnage fluctuations for the 10 years, 1880–1889.
- Table 31.—Ship building for the 10 years, 1880–1889 (general).
- Table 32.—Ship building for the 10 years, 1880–1889 (steamers).

Congressional appropriations:
- Table 33.—Appropriations for lakes, by detailed localities.

While such a list as the preceding is useful to show at a glance the scheme on which the tabulation of the statistics has been carried out, it sometimes fails to show explicitly what a table contains, because of the necessity for condensation of titles, and in order to more clearly indicate the "Plan of the tables" the following synopsis is printed:

EQUIPMENT.

Table 1, "Equipment of fleets in general", shows the number, tonnage, and value of all steamers, sailing vessels, and unrigged craft, of over 5 tons burden, owned on the Great Lakes and St. Lawrence river in 1889, with separate entries by ports, grouped by lakes.

Table 2, entitled "Equipment of fleets, by classes", divides the entries of Table 1, separating the total number, tonnage, and value of all steamers, sailing vessels, and unrigged craft into classes, and retaining the separate entries by ports and the lake groups. The steamers are divided into 5 classes, namely, side-wheel passenger boats, propellers carrying both passengers and freight, propellers carrying freight only, tugs, and all other classes, while the sailing and unrigged vessels are divided into 3 classes, schooners, lake barges, and all other classes. By this allotment the number, tonnage, and value of each class of craft operating on the Great Lakes and St. Lawrence river may be readily seen.

OCCUPATION.

Table 3, entitled "Percentages of tonnage and valuation", gives the number, gross and net tonnage, estimated carrying capacity, commercial valuation, and value per gross ton of all vessels owned on the Great Lakes and St. Lawrence river, the great difference between this and the preceding table being that there are no entries by ports, that each lake fleet is subdivided into 17 classes of occupation, and that the percentage of both tonnage and valuation of each class to the lake totals are worked out.

Table 4, "Occupation, by class groups", gives the number, gross and net tonnage, estimated carrying capacity, commercial value, and value per gross ton of each of the 17 classes of vessels on each of the Great Lakes and St. Lawrence river, the headings in this case being the class of craft, and the entries being the respective lake totals of each class.

CONSTRUCTION.

There are 2 construction tables. The first, Table 5, "Construction, by localities", gives the number, tonnage, value, average value per ton, and average tonnage according to material of construction, of all vessels documented in the ports of the Great Lakes and St. Lawrence river, given by separate entries for each port.

The second construction table, Table 6, "Construction, by materials", gives the number, tonnage, value, average value per ton, and average tonnage of the same craft, but grouped according to material of construction, in contradistinction to the preceding table, in which the grouping is done by lakes.

TRAFFIC.

The statistics of traffic are presented in 12 tables, numbered consecutively from 7 to 18, inclusive. The first, Table 7, "Freight movement in general, by lakes", contains the receipts, shipments, total movement, percentage of traffic and commodity, excess of receipts over shipments, and excess of shipments over receipts of all freight moved on the Great Lakes and St. Lawrence river, dividing the commodities into the 4 following comprehensive classes:

- Class I.—Products of agriculture.
- Class II.—Products of mines and quarries.
- Class III.—Other products (such as animal products and lumber).
- Class IV.—Manufactures, miscellaneous merchandise, and other commodities.

This table is expanded into 6 subsidiary tables giving the receipts, shipments, and total movement of these classes of commodities, by lakes, together with the same calculations of percentages that are worked out in the table of totals.

Table 8, " Freight movement in general, by principal ports", follows the same plan of presenting the receipts, shipments, and total movement of all products, together with the percentage of traffic and commodity, except that it gives these figures for the 31 principal ports, with the smaller trading points presented together under the head of "All other ports", and a separate division or group being made for each of the 13 commodities embraced in the 4 comprehensive classes of products referred to in the preceding paragraph.

The third traffic table, Table 9, is a summarized statement of the freight movement, receipts, shipments, and total tonnage on the Great Lakes and St. Lawrence river entered up for all ports in the order of their traffic importance.

Table 10, entitled "Freight receipts, by extended list of commodities", is a statement of the receipts, by ports grouped according to their respective lakes, of a still more extended list of the articles embraced under the comprehensive heads of "Products of agriculture", "Products of mines and quarries", "Other products", and "Manufactures", the detailed list of commodities being increased from 13 to 26.

Table 11, " Freight shipments, by extended list of commodities", is a statement of the port shipments of all commodities similarly arranged with the preceding table of receipts.

Table 12, "Freight movement of combined receipts and shipments, by extended list of commodities", is a statement of both the port receipts and shipments of the articles given in Tables 10 and 11.

Table 13, "Total freight movement, by extended list of commodities", gives the receipts and shipments of all commodities by lake totals only, the detailed entries for the ports being omitted.

Table 14, "Freight movement of unclassified commodities (A)", gives the receipts and shipments by ports of those commodities for which no weight was furnished and which do not appear in the other tables, such commodities, for instance, as unweighed packages, cases, and parcels.

Table 15, "Freight movement of unclassified commodities (B)", is a description and an estimated weight in pounds of each unit of measurement mentioned in Table 14, worked out to an estimated result in tons.

Table 16. In this table, entitled "Freight values", an estimated value per ton is put on all the commodities moved, and the result in total values is worked out.

In the preceding tables of freight movement the volume of traffic was the aggregate of receipts and shipments for all ports, but in Table 17, entitled "Freight movement, by cargo tonnage", an aggregation is made of the single item of receipts or of shipments, according to whichever happened to be the larger.

Table 18. The passenger movement recorded in this table is confined to that on board steamers, is entered for the different ports for which a passenger traffic was reported, and is classified as belonging to regular passenger lines, to excursion boats, and to ferry service.

EARNINGS AND EXPENSE ACCOUNTS.

Table 19, entitled "Financial account in general", is almost a balance sheet of the industry of Water Transportation on the Great Lakes, showing, as it does, the gross earnings, expenses, and remaining net earnings of the lake fleet reporting financial operations, the entries being made for the ports of registration, with totals for those lakes to which the ports belong.

In making out Table 20, entitled "Expense account in detail", the expenses of reporting vessels, following the same division of ports of registration and lakes, are divided into the various items of port charges, wages, provisions, current repairs, fuel (for the steamers), other running expenses, commissions, insurance, taxes, and office expenses, the 10 principal items which constitute the shore and running expenses.

EMPLOYÉS.

A still further subdivision of expenses is made in Table 21, "Employés and wages, by ports". Here, however, one item only is selected, that being the interesting one of wages, and the average wages paid in each port to all grades of employés from captain to cook and from first engineer to ship's boy is given, together with the number of persons making up the ordinary crews required as the complement of all reporting craft, the number of persons receiving employment during the year in the operation of these vessels, and the average wages paid to each grade of employés in the respective ports.

Table 22, "Employés and wages, by lake totals", is really a résumé of Table 21, taking up, as it does, the total number of employés of each grade and the total monthly wages paid on the different lakes for such vessels as reported on wages and crews.

FUEL ACCOUNT.

Table 23, entitled "Fuel account", applies, of course, only to steamers. These steamers, however, are grouped under the class heads of (1) passenger, passenger and freight, and freight steamers; (2) ferryboats; (3) towboats, and (4) miscellaneous. For each of these classes and for each port the number of tons of coal and the number of cords of wood consumed in their operations are set down, together with the cost of the material.

COMPARATIVE STATISTICS.

All the tables which have been previously considered present only what may be called the positive statistics for 1889, whereas the 9 tables numbered inclusively 24 to 32 give the comparative statistics either for the 2 years 1880 and 1889 or for the 10 years 1880–1889, inclusive. In the first 4 tables the 2 years of report alone are taken into consideration, the items being gathered from the transportation volume issued by the Census Office for 1880 and from the schedules of the present inquiry. Because of the restricted scope of the inquiry by the Tenth Census, comparisons of a very limited character only can be afforded. All that is possible in this direction in fact is given in Tables 24, 25, 26, and 27, which deal respectively with the number, tonnage, and value; the expense account; the crews and wages, and the traffic in bulk of the steamer fleets, no investigation having been made into either the equipment or the operations of sailing vessels. In Table 24 a partial classification of the steamer fleet has been possible, and the equipment figures are allotted to passenger and freight boats, ferry, towing, and harbor, and miscellaneously employed steamers; but in Tables 25, 26, and 27 the unit of comparison is the very comprehensive one of a total for all the lakes, whether for the items of expenses, wages, crews, or freight and passenger traffic.

Tables 28, 29, 30, 31, and 32 have been largely made up from information furnished this office by the Commissioner of Navigation. In Table 28 there are given the figures showing the number and tonnage of all steamers, sailing vessels, and barges registered in the customs districts of the Great Lakes for the 10 years 1880–1889, inclusive.

In Table 29 the average tonnage of each steamer, sailing vessel, and barge fleet belonging to each port is worked out for the decade in question, while Table 30 gives the fluctuations from the annual average number and the annual average tonnage of all vessels registered in the different customs districts. Tables 31 and 32 are records of shipbuilding for the period in question, the first giving the number and tonnage of all steamers, sailing vessels, and barges built during those years in the various customs districts, and the second (Table 32) furnishing the data to show the number and tonnage of all steamers built in the various districts, arranged according to their methods of propulsion, that is, whether propellers or side-wheel or stern-wheel steamers.

CONGRESSIONAL APPROPRIATIONS.

The last of the tables (Table 33) gives the amounts appropriated by Congress for the survey, improvement, and maintenance of the harbors on the Great Lakes and of the rivers flowing into them, from the date of the earliest appropriation down to and including that of the act of Congress of September, 1890. These sums, so far as the grouping of periods is concerned, are given: first, up to and including 1879; second, from 1880 to 1889, inclusive; third, the appropriations in 1890, and fourth, the total appropriations from first to last. So far as localities are concerned, these sums are given with considerable detail, the items not only being furnished for each lake but for each river, bay, and harbor on which the government money has been spent.

LOCALITIES OF REGISTRATION, EQUIPMENT, AND TRAFFIC.

At the risk of introducing a long parenthesis it will be advisable, before taking up the consideration of what the tables show, to explain the various localities to which the records of registration, equipment, or traffic are allotted.

In the first place, there are on the Great Lakes and St. Lawrence river 20 ports of registration, which, grouped by states and by lakes and rivers, are as follows:

BY STATES.

Ogdensburg, New York.
Cape Vincent, New York.
Alexandria Bay, New York.
Clayton, New York.
Oswego, New York.
Rochester, New York.
Suspension Bridge, New York.
Buffalo, New York.
Dunkirk, New York.
Erie, Pennsylvania.
Cleveland, Ohio.
Sandusky, Ohio.
Toledo, Ohio.
Detroit, Michigan.
Grand Haven, Michigan.
Marquette, Michigan.
Port Huron, Michigan.
Chicago, Illinois.
Milwaukee, Wisconsin.
Duluth, Minnesota.

BY LAKES AND RIVERS.

Ogdensburg, St. Lawrence river.
Cape Vincent, St. Lawrence river.
Alexandria Bay, St. Lawrence river.
Clayton, St. Lawrence river.
Oswego, Lake Ontario.
Rochester, Lake Ontario.
Suspension Bridge, Lake Erie.
Buffalo, Lake Erie.
Dunkirk, Lake Erie.
Cleveland, Lake Erie.
Sandusky, Lake Erie.
Toledo, Lake Erie.
Erie, Lake Erie.
Grand Haven, Lake Michigan.
Chicago, Lake Michigan.
Milwaukee, Lake Michigan.
Detroit, Lake Huron.
Port Huron, Lake Huron.
Marquette, Lake Superior.
Duluth, Lake Superior.

The preceding 20 ports, called ports of registration, are those in which all the vessels of the Great Lakes are documented, and which form the recognized centers where the Treasury Department keeps its lists of vessels, their character, tonnage, and construction. In the reports on the Atlantic coast, Gulf of Mexico, and Pacific coast, these ports of registration have been strictly followed in the tabulation of the statistics of equipment and of traffic, but because of the exigencies of locality it has been found necessary to make arbitrary assignments of the statistics in both the Mississippi valley and the Great Lakes. In the report on the Mississippi valley, for instance, it will be found that the segregation of all statistics is made by the rivers and fluvial systems, while in the case of the Great Lakes and St. Lawrence river it has been found advisable to make allotment of the statistics of equipment to what may be called the ports of frequent hail, and the statistics of traffic to the ports where records of business are kept. These two lists of ports are given below:

PORTS OF ASSIGNMENT FOR STATISTICS OF EQUIPMENT.

LAKE SUPERIOR.

Ashland, Wisconsin.
Baraga, Michigan.
Bayfield, Wisconsin.
Duluth, Minnesota.
Marquette, Michigan.
Pequaming, Michigan.
Republic, Michigan.
St. Marys Falls, Michigan.
Superior, Wisconsin.

LAKES HURON AND ST. CLAIR.

Algonac, Michigan.
Alpena, Michigan.
Bay city, Michigan.
Caseville, Michigan.
Cheboygan, Michigan.
Detroit, Michigan.
East China, Michigan.
East Saginaw, Michigan.
Marine city, Michigan.
Mount Clemens, Michigan.
New Baltimore, Michigan.
Oscoda, Michigan.
Port Huron, Michigan.
Saginaw, Michigan.
St. Clair, Michigan.

LAKE MICHIGAN.

Benton Harbor, Michigan.
Charlevoix, Michigan.
Chicago, Illinois.
Escanaba, Michigan.
Fort Howard, Wisconsin.
Frankfort, Michigan.
Grand Haven, Michigan.
Green Bay, Wisconsin.

LAKE MICHIGAN—continued.

Holland, Michigan.
Kenosha, Wisconsin.
Kewaunee, Wisconsin.
Ludington, Michigan.
Manistee, Michigan.
Manitowoc, Wisconsin.
Menominee, Michigan.
Milwaukee, Wisconsin.
Montague, Michigan.
Muskegon, Michigan.
North Port, Michigan.
Onekama, Michigan.
Pentwater, Michigan.
Peshtigo, Wisconsin.
Petoskey, Michigan.
Racine, Wisconsin.
St. James, Michigan.
St. Joseph, Michigan.
Saugatuck, Michigan.
Sheboygan, Wisconsin.
South Haven, Michigan.
Spring lake, Michigan.
Sturgeon bay, Wisconsin.
Suttons bay, Michigan.
Traverse city, Michigan.
Troy, Wisconsin.
Waukegan, Illinois.
Waukesha, Wisconsin.
Whitehall, Michigan.

LAKE ERIE.

Ashtabula, Ohio.
Avon, Ohio.
Buffalo, New York.
Cleveland, Ohio.
Dunkirk, New York.

LAKE ERIE—continued.

Erie, Pennsylvania.
Fairport, Ohio.
Fremont, Ohio.
Gratwick, Ohio.
Huron, Ohio.
Lorain, Ohio.
Milan, Ohio.
Norwalk, Ohio.
Port Clinton, Ohio.
Put in Bay, Ohio.
Sandusky, Ohio.
Suspension Bridge, New York.
Toledo, Ohio.
Tonawanda, New York.
Vermilion, New York.

LAKE ONTARIO.

Cape Vincent, New York.
Charlotte, New York.
Chaumont, New York.
Hamlin, New York.
Henderson, New York.
Medina, New York.
Oswego, New York.
Pultneyville, New York.
Rochester, New York.
Sacketts Harbor, New York.
Sodus Point, New York.
Troy, New York.
Wilson, New York.
Youngstown, New York.

ST. LAWRENCE RIVER.

Alexandria Bay, New York.
Clayton, New York.
Ogdensburg, New York.

PORTS OF ASSIGNMENT FOR STATISTICS OF TRAFFIC.

LAKE SUPERIOR.

Ashland, Wisconsin.
Baraga, Michigan.
Bay Mills, Michigan.
Duluth, Minnesota.
Houghton, Michigan.
Marquette, Michigan.
Ontonagon, Michigan.
Pequaming, Michigan.
St. Marys Falls, Michigan.
Superior, Wisconsin.
Two Harbors, Minnesota.
Washburn, Wisconsin.

LAKES HURON AND ST. CLAIR.

Algonac, Michigan.

LAKES HURON AND ST. CLAIR—continued.

Alpena, Michigan.
Bay city, Michigan.
Black river, Michigan.
Cheboygan, Michigan.
Detroit, Michigan.
East Saginaw, Michigan.
East Tawas, Michigan.
Forestville, Michigan.
Marine city, Michigan.
Marysville, Michigan.
Oscoda, Michigan.
Port Huron, Michigan.
Port Sanilac, Michigan.
Rogers, Michigan.
St. Clair, Michigan.

LAKES HURON AND ST. CLAIR—continued.

St. Ignace, Michigan.
Sand Beach, Michigan.
Sebawaing, Michigan.

LAKE MICHIGAN.

Benton Harbor, Michigan.
Charlevoix, Michigan.
Chicago and South Chicago, Illinois.
Cross village, Michigan.
Depere, Wisconsin.
Elk Rapids, Michigan.
Escanaba, Michigan.
Fayette, Michigan.
Ford River, Michigan.
Fruitport, Michigan.

PORTS OF ASSIGNMENT FOR STATISTICS OF TRAFFIC—Continued.

LAKE MICHIGAN—continued.

Gladstone, Michigan.
Glen Arbor, Michigan.
Grand Haven, Michigan.
Green Bay, Wisconsin.
Kenosha, Wisconsin.
Kewaunee, Wisconsin.
Leland, Michigan.
Ludington, Michigan.
Manistee, Michigan.
Manistique, Michigan.
Manitowoc, Wisconsin.
Marinette, Wisconsin.
Menominee, Michigan.
Michigan city, Indiana.
Milwaukee, Wisconsin.
Montague, Michigan.
Muskegon, Michigan.
Oconto, Wisconsin.
Pentwater, Michigan.
Peshtigo Harbor, Wisconsin.
Petoskey, Michigan.
Port Washington, Wisconsin.
Racine, Wisconsin.
St. Joseph, Michigan.

LAKE MICHIGAN—continued.

Sheboygan, Wisconsin.
South Haven, Michigan.
Traverse, Michigan.
Two Rivers, Michigan.
Waukegan, Illinois.

LAKE ERIE.

Ashtabula, Ohio.
Buffalo, New York.
Cleveland, Ohio.
Dunkirk, New York.
Erie, Pennsylvania.
Fairport, Ohio.
Huron, Ohio.
Kelleys Island, Ohio.
Lorain, Ohio.
Sandusky, Ohio.
Toledo, Ohio.
Tonawanda, New York.

LAKE ONTARIO.

Cape Vincent, New York.
Charlotte, New York.
Chaumont, New York.

LAKE ONTARIO—continued.

Dexter, New York.
Henderson, New York.
Millins Bay, New York.
Oak Orchard, New York.
Olcott, New York.
Oswego, New York.
Pultneyville, New York.
Sacketts Harbor, New York.
Sandy creek, New York.
Sodus Point, New York.
Wilson, New York.
Youngstown, New York.
Fairhaven, New York.

ST. LAWRENCE RIVER.

Alexandria Bay, New York.
Chippewa bay, New York.
Clayton, New York.
Massena, New York.
Grindstone island, New York.
Morristown, New York.
Ogdensburg, New York.
Thousand Island Park, New York.
Waddington, New York.

WHAT THE TABLES SHOW.

Following the consideration of the "Plan of the tables", the next step will be an inquiry as to what the tables show.

From the first of the whole series of the 33 tables it appears that on the Great Lakes and St. Lawrence river in the year ending December 31, 1889, the floating equipment numbered 2,737 craft, having a tonnage of 920,294 and an estimated commercial value of $48,580,174. The components of this fleet were 1,467 steamers, with a tonnage of 595,813 and a value of $40,868,824; 962 sailing vessels, with a tonnage of 185,081 and a value of $4,238,850, and 308 unrigged craft, with a tonnage of 139,400 and a value of $3,472,500. The various vessels that make up the preceding totals are entered for the ports which were given in the list on page 9 entitled "Ports of assignment for statistics of equipment", together with totals for the lakes on which these ports are found. These totals show that on Lake Superior there were at the close of 1889 167 vessels of all kinds, with a tonnage of 39,653 and a value of $2,763,500; that the fleets on lakes Huron and St. Clair numbered 726, with a tonnage of 262,833 and a value of $13,107,650; that the Lake Michigan fleet amounted to 1,003 craft, with a tonnage of 196,216 and a value of $9,114,400; that the floating equipment on Lake Erie numbered 667, with a tonnage of 392,903 and a value of $22,163,824; that on Lake Ontario there were 131 vessels, with a tonnage of 15,859 and a value of $676,300; while on St. Lawrence river there were owned 43 vessels, with a tonnage of 12,830 and a value of $754,500.

Table 2 presents the totals of the preceding table under the various heads of side-wheel passenger, propellers carrying both passengers and freight, propellers carrying freight only, tugs, schooners, and lake barges, together with their respective number, tonnage, and value. These details are given for the same 98 ports that were quoted in the preceding table. One of the most interesting facts shown by this table is that nearly two-thirds the vessels on the Great Lakes are assigned to 7 of these ports, namely, Chicago, Port Huron, Detroit, Milwaukee, Grand Haven, Cleveland, and Buffalo.

Some idea of the size of these port fleets may be gathered from the following summary, which shows the number and tonnage of certain classes of vessels which are assigned to them:

TABLE A.—SUMMARY SHOWING THE NUMBER AND TONNAGE OF CLASSIFIED VESSELS FOR THE SEVEN LEADING PORTS, TO WHICH HAVE BEEN ASSIGNED THE STATISTICS OF EQUIPMENT ON THE GREAT LAKES FOR 1889.

CITIES.	Total.		Propellers carrying both passengers and freight.		Propellers carrying freight only.		Schooners.		Barges.		All other classes.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Grand total	2,737	920,294	303	143,907	433	388,978	917	184,029	301	138,404	783	64,976
Total of the 7 ports	1,814	638,599	167	101,193	349	310,316	622	120,302	129	58,514	547	48,274
Chicago	339	71,260	34	13,181	28	10,960	155	35,859	18	6,255	104	5,005
Port Huron	293	61,482	11	1,887	73	40,840	100	6,302	21	6,797	88	5,656
Detroit	275	129,768	17	8,565	56	56,994	83	19,074	44	21,387	75	23,748
Milwaukee	259	61,694	12	3,282	53	39,172	129	13,034	6	2,246	59	3,960
Grand Haven	225	22,308	31	5,750	23	6,305	74	4,784	1	618	96	4,851
Cleveland	219	163,227	19	33,986	66	83,979	64	30,873	19	12,302	51	2,087
Buffalo	204	128,860	43	34,542	50	72,066	17	10,376	20	8,909	74	2,967
Total other ports	923	281,695	136	42,714	84	78,662	295	63,727	172	79,890	236	16,702

A SERIES OF PERCENTAGES.

In Table 3 the 2,737 craft which constituted the total fleet of the Great Lakes and St. Lawrence river are subjected to a series of percentage calculations, one of which pertains to tonnage and the other to valuation, from which may be learned what proportion the tonnage or the value of any particular class of vessels bore to the total tonnage or total value of all vessels on the particular lake named, and what proportion the tonnage or the value of any particular class of vessels bore to the total tonnage of that class of vessels on all these waters. For example, it appears that the gross tonnage of steam propellers carrying freight only on Lake Superior was 13,517 tons, or 34.09 per cent of the gross tonnage on that lake. It also appears that the tonnage of steam propellers carrying freight only constituted but 3.47 per cent of the total tonnage of such vessels. Turning next to the subject of valuation, it is seen that the total value of steam propellers on Lake Superior carrying freight only was $898,500, which was 32.51 per cent of the total value of all vessels on Lake Superior, or 3.83 per cent of the total value of this class of vessels on all the lakes. Similar percentages are given for each lake and for each of the 17 classes of vessels, side-wheel passenger, propellers carrying both passengers and freight, propellers carrying freight only, tugs, ferries, pleasure yachts, pile drivers, sand dredges, sand boats, fire boats, steam lighters, unclassified vessels, schooners, lake barges, scows, sloops, and yawls.

In Table 4 each of the 17 classes is considered separately, the details of number, gross and net tonnage, estimated carrying capacity, commercial value, and value per gross ton being entered to the credit of each class from each lake. That is, for example, it is shown that on all the lakes there were 62 side-wheel passenger steamers, of which number 23 were employed on lakes Huron, and St. Clair, 22 on Lake Michigan, 10 on Lake Erie, 4 on Lake Ontario, and 3 on the St. Lawrence river; that the gross tonnage of these 62 side-wheel passenger steamers found on all the lakes was 27,259, of which the Huron and St. Clair proportion was 17,729 tons, the Michigan proportion 5,879 tons, the Erie proportion 2,221 tons, the Ontario proportion 553 tons, and the St. Lawrence river proportion 877 tons. Similar entries for all the lakes are made for the other items and the other classes which have been mentioned. Material will be found also in this table for a calculation showing the average tonnage, average commercial value, and average commercial value per ton of all the 17 classes of craft mentioned; and in the accompanying summary these averages will be found worked out for the 5 principal classes of vessels:

TABLE B.—SUMMARY SHOWING THE AVERAGE TONNAGE AND AVERAGE COMMERCIAL VALUE PER CRAFT AND PER TON OF THE 5 PRINCIPAL CLASSES OF VESSELS OPERATING ON THE GREAT LAKES AND ST. LAWRENCE RIVER IN 1889.

CLASSES OF CRAFT.	Average tonnage.	Average commercial value.	Average commercial value per ton.
Propellers carrying both passengers and freight	475	$36,208	$76.24
Propellers carrying freight only	898	54,131	60.26
Tugs	50	5,228	104.55
Schooners	201	4,599	22.88
Lake barges	460	11,507	25.02

STATISTICS OF CONSTRUCTION.

Tables 5 and 6 present the same statistics but in two methods. They correspond, in fact, in the plan of their presentation, with the two preceding tables. The first takes up each lake as a group and for each of the ports belonging to that lake enters up the number, tonnage, value, average value per ton, and average tonnage of each fleet, classed by material of construction. That is, the entries for the port of Duluth, which is on Lake Superior, are that the fleet of that port included 3 vessels of steel, 2 of iron, 33 of wood, and 1 of composite material; that the tonnage of Duluth's 3 steel vessels was 2,684, that their value was $175,000, that their average value per ton was $65, and that their average tonnage per craft was 895; that the tonnage of Duluth's 2 iron vessels was 98 tons, their value $20,000, their average value per ton $204, and their average tonnage 49, and so on all through the list. Without taking up the details of the ports, there is gathered from Table 5 that Marquette's fleet included 4 steel vessels, which were valued at $900,000, and had an average tonnage of 2,476; that Detroit's fleet included 258 wooden vessels, whose average tonnage was but 408, but whose aggregate value was $4,936,800; that Chicago's wooden fleet numbered 335 vessels, valued at $2,723,350, while Milwaukee's wooden fleet numbered only 256, but was valued at $3,123,000; that Buffalo's fleet included 14 steel vessels, which had the high average tonnage of 2,132 per vessel, and an aggregate value of $2,950,000, and that Cleveland's wooden fleet was even more valuable than Milwaukee's, the 208 vessels of that material accredited to the principal port on Lake Erie being valued at $7,035,800.

In Table 5 the facts connected with material of construction were assigned chiefly to localities, while in Table 6 the details are assigned chiefly to the material of construction. That is, in Table 5 the headings were the lakes, while in Table 6 the headings are the materials. One sees, for instance, that on all the lakes there were 40 vessels of steel, which had a tonnage of 75,488, a value of $7,349,000, an average value per ton of $97, and an average tonnage of 1,887; that the iron fleet numbered 45 vessels, with a tonnage of 35,922, a value of $3,225,224, and an average value per ton of $90, and an average tonnage of 798; that the composite numbered 11, having a tonnage of 14,756, a value of $1,228,000, an average value per ton of $83, and an average tonnage of 1,341 per vessel; and that the lake wooden fleet was 2,641 vessels, at an aggregate tonnage of 794,128, an aggregate value of $36,777,950, an average value per ton of $46, and an average tonnage per vessel of 301. The same figures of aggregates and averages are given for each port, and there is the material for many valuable calculations which those interested in lake statistics will doubtless find it useful to work out.

FREIGHT TRAFFIC.

The statistics of freight traffic will be found presented in 12 tables, numbered from 7 to 18, inclusive. In all of these, with the exception of the last 3, the amounts of freight moved are given respectively as those of "Receipts", "Shipments", and "Total movement". Trade between American and Canadian ports is included in these statements, but the coastwise trade between Canadian ports is of course excluded. The division of the commodities into the 4 groups entitled "Products of agriculture", "Products of mines and quarries", "Other products", and "Manufactures, miscellaneous merchandise, and other commodities", set down in Table 7, has been made, because under these groups the principal articles of the lake commerce can be properly placed, and because this classification conforms in a general way to that adopted for all transportation statistics, thus providing for an easy comparison between lake traffic and the traffic of other sections of the country. It may be added here that the sources from which these statistics of traffic have been obtained are, first, reports from the customs offices of receipts and shipments; second, reports from leading shippers at ports having no customs offices; and third, reports from the important transportation lines operating on the Great Lakes and covering that portion of the traffic not included in port manifests. The reports of the boards of trade in the important cities have also been made use of to check and correct the information thus obtained, and it is believed that the figures presented are trustworthy and accurate.

LOCALIZATIONS OF TRADE.

In Table 7 the localization is made according to the lakes, and, in addition to the division of freight into the groups of locality and those of commodity, which have already been referred to, it contains a number of interesting percentages. These include not only the per cent of total traffic and the per cent of total commodity contributed by each lake to that traffic, but there also is a summary given in which the same percentages are applied to the excess of total shipments over total receipts, and excess of total receipts over total shipments.

A few words are necessary to explain these percentage columns. The first inserted alike under "Receipts", "Shipments", and "Total movement", shows what proportion the traffic of any commodity named bears to the total freight movement on the body of water for which the statistics are compiled. For example, the shipments of iron ore on Lake Superior were 4,141,057 tons, or 76.20 per cent of the total shipments of all commodities on that lake. These figures, therefore, indicate the relative importance of the various commodities in the commerce of the waters named. The percentage columns of the summary giving the total traffic show what proportion the traffic in any commodity named on a given lake bears to the total traffic in the same commodity on all the lakes.

For example again, Table 7 shows the total shipments of iron ore to have been 7,677,107 tons, while the shipments of that commodity from Lake Superior ports were, as has been seen, 4,141,057 tons, or 53.94 per cent of the total shipments of all iron ore on the Great Lakes and St. Lawrence river.

The most interesting point in connection with this summary of Table 7 is that part of it in which is given a balance sheet of receipts and shipments. From this it appears that the total receipts exceeded the total shipments by 669,158 tons, or 2.58 per cent of the aggregate freight traffic of all the lakes.

RECEIPTS AND SHIPMENTS.

It may be stated here that the only commodities of which the receipts and shipments nearly balanced are iron ore, flour, shingles, and pig iron. Table 7 does not separate the figures respecting these commodities except for iron ore, but in the commodity tables 10, 11, 12, and 13, such a separation has been effected for a number of commodities, and from the data there given many interesting balances may be struck.

For most of the other commodities the difference between receipts and shipments is quite marked. Coal, for example, shows an excess of shipments over receipts of 943,328 tons, or 15.45 per cent. This is in large measure explained by the fact that 562,834 tons of coal were exported from American ports on Lake Ontario to Canada, and that 25,931 tons are reported to have passed through the Welland canal. This leaves 354,563 tons to be accounted for. In the case of a commodity like coal, which is so universally used, it is fair to say that this excess was shipped to Canadian ports west of the Welland canal and to small ports within the United States, of which there is no record.

The shipments of wheat exceeded receipts by 1,666,267 bushels, or 49,988 tons. This is accounted for by the export of wheat to Canada, which passed through the Welland canal and St. Lawrence river to Montreal.

The shipments of corn exceeded the receipts by 12,346,893 bushels, or 345,713 tons. This shows an excess of shipments over receipts of 17.92 per cent. On investigation, however, it was found that 7,376,786 bushels of corn were exported to Canada via the Welland canal, and 3,758,427 bushels were shipped to Sarnia and Georgian bay for transshipment in bond through Canada to points in the United States.

The summary of Table 7 also shows that the shipments of "Other grains" exceeded receipts by 25,720 tons. This was principally due to the excess of shipments of oats over receipts, amounting to 7,890,593 bushels. Of this amount it was learned that 4,937,889 bushels were shipped to Sarnia and Georgian bay ports for transportation through Canada, and the remainder, it is believed, consisted of direct exports to Canada and of shipments to small ports on the Great Lakes, where no customs offices were located and no records of receipts were kept.

SAMPLE MOVEMENTS.

The discrepancy observed between the receipts and shipments of "All other farm products", 42,852 tons, was due to the fact that the commodities included under this head were shipped from small ports, of which they formed a considerable portion of the total traffic, and were given separately in the reports made, whereas they were received at large ports and were reported under the head of "Miscellaneous".

Lumber shows an excess of receipts over shipments of 676,244,000 feet, or 1,508,859 tons, making 22 per cent of total shipments. This was partly due to the heavy importation of Canadian lumber and partly to the fact that lumber was shipped in considerable quantities from a large number of isolated mills located at remote points on the more western lakes, where no record of shipments was kept or could be obtained.

No satisfactory explanation can be given of the fact that the receipts of salt exceeded shipments by 43,676 tons. It should be stated, however, that much confusion arose in the estimates of this commodity from the fact that it was shipped both in sacks and barrels, and that the custom house authorities of various ports failed to follow the same rule in converting it into tons.

The excess of receipts of stone over shipments, which amounts to 74,801 tons, is due to the fact referred to in the case of lumber, that is to say, the sources from which stone was obtained did not permit a correct statement of shipments.

RELATIVE IMPORTANCE OF TRADING POINTS.

Another form of localization is adopted in Table 8, entitled "Freight movement in general, by ports". Here the side lines are 31 selected ports, instead of the 4 comprehensive groups of commodities as they were in Table 7, while each commodity is made the title of a separate table. These 31 ports, it should be stated, have been selected because they had a total freight traffic of 250,000 tons or over. The percentages in Table 8 are equally interesting with those of Table 7.

The first column of percentages, given alike under "Receipts", "Shipments", and "Total movement", shows what proportion of traffic in the commodity in question was done by the port named. For example, the total shipments of wheat were 969,150 tons, of which Chicago shipped 312,203 tons, or 32.21 per cent of the total wheat traffic reported. The second column of percentages is designed to show what proportion of the total traffic of any port was due to the receipts and shipments of any commodity named. For example, the total shipments from Chicago amounted to 2,914,065 tons, 10.71 per cent of which, or 312,203 tons, was, as has been seen, shipments of wheat. By referring, therefore, to the columns of percentages three important facts may be learned: first, the relative importance of any particular port in the traffic of any commodity named; second, the relative importance of any commodity in the traffic of any port named; third (by referring to the summary), the relative importance of any port in the total traffic of the Great Lakes and St. Lawrence river.

An example of the first calculation of percentages is found in that part of the table which refers to the movement of iron ore. Here it is seen that, so far as shipments went, Escanaba exported 3,364,067 tons of that product, or 43.82 per cent of the total iron ore exporting traffic on these waters; but as this port's traffic in iron ore was confined to its exportation, its percentage of the total iron ore movement on the lakes was reduced to 21.98 per cent. The same port may be retained as an example of the second class of percentages, in which it is seen that the 3,364,067 tons of iron ore which were shipped from Escanaba constituted 98.06 per cent of the entire traffic of the port. As to the third class of percentages, Escanaba being still kept as an example, the summary will show that its relative importance in the total shipment traffic was 13.58 per cent of the total shipment.

TRAFFIC IMPORTANCE.

A still further step in the localization of the freight movement is made in the résumé, Table 9, which gives the statistics of receipts, shipments, and total movement of freight at the 107 lake and river traffic points which are embraced in the list on pages 9 and 10, entitled "Ports of assignment for statistics of traffic", and from which returns have been received. No attempt has been made to work out the percentages of all these 107 ports, both because the calculations of percentage have been made with sufficient detail in the other tables and because these additional calculations would require a far greater labor than would be commensurate with the results.

Neither are these traffic points arranged according to the lakes on which they are situated, but in an unbroken list running according to their traffic importance. Chicago, it will be seen, easily heads the list, its freight receipts having been 5,069,973 tons, and its shipments 2,914,065 tons, a total of 7,984,038 tons. Buffalo, which is next on the list, had a total freight movement of 6,730,137 tons, made up of 4,046,144 tons of receipts and 2,683,993 tons of shipments. The total traffic of Escanaba, which comes third, was 3,626,390 tons, and it is curiously made up, for while its receipts were only 195,558 tons, its shipments amounted to no less than 3,430,832 tons, which made it the greatest shipping port on the lakes. The traffic of Cleveland, which occupies the fourth place, is made up on exactly reverse grounds to that of Escanaba, for in Cleveland's case out of a total of 3,621,570 tons the shipments were but 883,862 tons, while the receipts were 2,737,708 tons. In some of the ports it will be noticed there is but 1 entry. Tonawanda, for instance, which is thirteenth on the list, appears to have been a port of receipts only, as were also Dunkirk, Waukegan, Dexter, Pultneyville, Oak Orchard, Sandy Creek, Millens Bay, Thousand Islands Park, and Youngstown, while Two Harbors, Oscoda, Peshtigo Harbor, Baraga, Pequaming, Ontonagon, Marysville, Leland, and Glen Arbor were ports of shipment only. It would be but a reproduction of the table to quote extensively from its entries, and it need only be mentioned here that the traffic figures diminish almost ton by ton until the last entry is reached, that being Youngstown, with a total traffic for the year of 75 tons.

DETAILS OF COMMODITIES.

In Table 9 the ports, as has been stated, were arranged in the order of their importance as determined by the total amount of traffic, but in the 4 tables, 10, 11, 12 and 13, in which the work of particularization is still further carried out, these 107 ports are allotted to their respective lakes, while to each port, with totals for the lakes, there are given in detail the receipts, shipments, and total movement of all commodities. In the extended division of commodities, instead of the 13 headings which were given in Table 7 and Table 8, these commodity tables give no less than 26 headings, or just double that number. Apart from the usefulness of the extensive detailed work shown in Tables 10, 11, 12 and 13, the chief point of interest in the exhibit there made, as indeed in all the tables wherein commodities are shown, is the fact that the 3 articles of coal, iron ore, and lumber comprise 75.73 per cent of the total freight movement on the lakes. If to these commodities be added corn, 82.59 per cent of the total freight tonnage is accounted for, and if to the commodities above named there be added wheat and mill products, there would only remain 10.03 per cent of the total tonnage unaccounted for. It is, then, the simplicity of the lake commerce, so far as the leading commodities are concerned, which is its chief characteristic.

The best illustration of the fact is found in Table 13, entitled "Total freight movement, by extended list of commodities". Here it is shown that the total movement of coal on all the lakes amounted to 11,268,270 tons; that the total movement of iron ore amounted to 15,303,180 tons; that the lumber movement was that of 12,205,655 tons; that the corn movement amounted to 3,513,515 tons; that the wheat movement reached 1,888,312 tons, and that of mill products amounted to 1,886,189 tons. These items represent the movement of 46,065,121 tons out of a total movement of 51,203,106 tons, leaving but a balance of 5,137,985 tons, and when from this amount is taken the 1,623,115 tons of unclassified merchandise there will remain but 3,514,870 tons to be divided among the other commodities. Between the 1,886,189 tons of mill products and the next commodity in order of importance there is indeed a great disparity of movement. The closest item is the composite one of "Other grains", of which the movement was 980,514 tons, after which the record drops to the half-million-ton standard, the commodity of salt having been transported to the extent of 549,350 tons and that of stone to 547,229 tons. The total movement of the other commodities ran as follows:

	TONS.
Other iron manufactures	320, 303
Iron, pig and bloom	316, 224
Cement, brick, and lime	181, 462
Other products of agriculture	132, 517
Animal products	123, 495
Sugar	103, 317
Other ore than iron	71, 562
Petroleum	52, 582
Other manufactures	28, 735
Fruit	26, 984
Products of mines and quarries other than coal, stone, and salt	23, 587
Ice	18, 912
Hay	18, 077
Liquors	14, 236
Potatoes	3, 698
Live stock	2, 086

COMMODITY MOVEMENTS.

Looking at the movement of the 6 principal items, iron ore, lumber, coal, corn, wheat, and mill products, with more regard to the limitations of traffic, it is seen in Table 13 that the largest movement in iron ore was that of receipts by the ports on Lake Erie, the figures being 6,490,518 tons out of a total for all the lakes of 15,303,180 tons, and tracing down these ports on Lake Erie in Table 10, one finds that the three great ports at which receipts of iron ore were had were Ashtabula, at which was received 2,199,109 tons; Cleveland, at which the receipts were 1,951,564 tons, and Fairport, which received 928,616 tons. Table 13 also informs us that lakes Superior and Michigan were the lakes from which the great bulk of the iron ore was shipped, the figures being: Lake Superior, 4,141,057 tons, and Lake Michigan 3,446,947 tons, the addition of which 2 amounts gives 7,588,004 tons out of a total shipment movement of 7,677,107 tons. The detailed information of Table 11 explains this matter thoroughly and shows that on Lake Superior there were 3 ports from which all its shipments of iron ore were made, these being Ashland, 1,663,021 tons; Marquette, 1,541,495 tons, and Two Harbors, 936,541 tons; while on Lake Michigan there were but 2 ports from which iron ore was shipped, these being Escanaba, to which reference has already been made, with 3,364,067 tons, and Gladstone, 82,880 tons.

The total movement of coal on all the lakes, it will be remembered, was 11,268,270 tons, made up of 5,162,471 tons receipts and 6,105,799 tons shipments. The only 2 lakes, as Table 13 shows, of which the receipts were of any consequence were Lake Michigan, where the receipts were 2,865,021 tons, and Lake Superior, where the receipts were 1,754,675 tons; while nearly the entire amount of coal shipments were made on Lake Erie, the figures being 5,196,182 tons; the next and only lake of importance as a shipping lake being Lake Ontario, on which the coal shipments were 764,355 tons. Turning back to Table 10 it will be seen that the records of the individual port receipts of coal clearly indicate the importance and extent of the industries of the respective places. The largest receipts for coal, for example, on Lake Michigan were naturally at Chicago, the figures being 1,329,364 tons, and then Milwaukee, with 907,743 tons; while on Lake Superior the great receiving points for coal were Superior, 720,000 tons, and Duluth, 485,000 tons. When it comes to shipments, however, the story is quite a different one, the main port on Lake Erie being Buffalo, the shipping point of the Pennsylvania anthracite, the figures being 2,156,670 tons. Cleveland and Toledo are also large shipping points, the shipments from the first-named port being 825,030 tons, and from the second, 650,000 tons. On Lake Ontario the great coal-shipping point was Charlotte, from which 350,000 tons were sent. In a similar way the record of all the commodities could be worked out and no better history could be furnished of the whole traffic than would result from such a study, but enough space has already been taken up in indicating how this analysis of the tables may be made and of the lessons which would result from such an analysis.

A DIVERSITY OF ITEMS.

It was stated on page 14 that "the simplicity of the lake commerce, so far as the leading commodities are concerned, is its chief characteristic", but it must not be inferred, however, that because of the preponderance of three or four commodities the commerce of the lakes is not a diversified one. The contrary is, indeed, the case, as may be seen by the following lengthy list of commodities which are included in the 5 divisions of "Products of agriculture", "Products of mines and quarries", "Other products", "Manufactures", and "Unclassified":

Products of agriculture:
- Wheat includes all wheat.
- Corn includes green corn.
- Other grains include barley, buckwheat, oats, rye, and rice.
- Mill products include bran, corn meal, flour, ground feed, mill stuffs, malt, middlings, oatmeal, and oil cake.
- Fruit includes all kinds of fruit.
- Other farm products include onions, straw, butter, cheese, eggs, peas, broom corn, vegetables, cider, seeds, cotton, and tobacco.

Products of mines and quarries:
- Other ore includes copper ore and spelter.
- Stone includes limestone, sandstone, paving stone, grindstone, building stone, marble, and sand.
- Other mine products, not specified, include bullion, mica, plaster, and sulphur.

Other products:
- Animal products include beef, cured meats, hides and skins, pork, leather, lard, tallow, wool, and poultry.
- Live stock includes hogs, horses, cattle, and sheep.
- Lumber, all kinds, includes car sills, Georgia pine, hoops, hoop poles, heading, matchwood, moldings, piles, posts, pickets, slabs, staves, bolts, ties, wood, lath, and shingles.

Manufactures:
- Petroleum includes other oils.
- Other iron manufactures include castings, bolts, railroad iron, nails, stoves, steel, spikes, machinery, bar and sheet metal, and rails.
- Liquors include spirituous and malt liquors of all kinds and alcohol.
- Other manufactures, not specified, include acid, ammonia, alum, bottles, bags, baskets, crockery, fertilizer, furniture, earthenware, lead, wagons, mantels, paints, pianos and organs, paper, trunks, pipes, jars, and twine binders.

Unclassified:
- Merchandise and other commodities include ashes, empty barrels, bark, empty cases, household goods, fish poles, scrap iron, junk, empty kegs, mineral water, oakum, pulp, rags, sulphite, fiber, canned goods, coffee, candles, chestnuts, drugs, fish, groceries, glass, glucose, sirup, explosives, mill merchandise, rope, starch, soap, toys, tea, varnish, vinegar, sawdust, and sundries.

UNCLASSIFIED COMMODITIES.

The 25,936,132 tons of received freight and the 25,266,974 tons of shipped freight, which have been given in traffic tables 7 to 13, inclusive, do not really include all the freight for which returns even have been made, but only that amount which could be accurately reduced to the uniform unit of a 2,000-pound ton. A very large amount of freight was reported on which no such accurate reduction could be made, these returns being set down in Table 14. Among the much diversified commodities which are given in this table are household goods, window sashes, pianos, empty cases, thrashing machines, and home and farm utensils and machinery of many descriptions. The principal item, however, was that of merchandise waybilled as "packages", of which packages there were no fewer than 8,937,402.

These unclassified commodities represented so large a freight tonnage that an estimate of their freight in tons has been made. That attempt is set down in Table 15, wherein is shown the unit of measurement or description, the estimated weight in pounds per unit, and the estimated result in tons of all these much diversified goods, the result being an addition of 460,777.23 tons to the figures which stand as the totals of the general traffic tables.

CARGO TONNAGE.

While in all these tables the receipts, shipments, and total movement of freight have been quoted as representing the traffic on the Great Lakes and St. Lawrence river, it must be observed that it is a problem in accurate statistics whether the aggregate of receipts and shipments does not show a larger movement than the actual returns of cargo tonnage would do. In Table 16 the principle has been followed that the volume of traffic would be more clearly measured, not by this aggregate of receipts and shipments for all ports, but rather by taking in the case of each commodity either receipts or shipments, whichever happened to be the larger, and using this single amount to represent the cargo tonnage of that commodity. The totals of this table are drawn from Table 8.

PASSENGER RETURNS.

The last of the traffic tables, Table 17, furnishes the figures showing the passenger movement on these waters. From the returns there shown it appears that 775,871 persons traveled on regular passenger or regular passenger and freight boats; that 836,648 excursion passengers were reported on, and that there were 623,474 ferry passengers, making a total of 2,235,993 passengers. A consideration of these totals is postponed until the subject of comparative statistics is taken up. It will be enough to say here that nearly one-half of the excursion passengers is credited to Lake Erie, on which lake there seems to have been moved a total of 369,924 excursionists, and that Toledo was the great excursion point, no fewer than 257,046 being the number set down. The lake on which the greatest regular passenger business is reported to have been conducted is Lake Huron, which gives 315,120 out of a total of 775,871. The figures of passenger traffic are interesting so far as they go, but it must be confessed that the returns were not made with that scrupulous care which characterized the schedule reports of traffic and equipment.

FREIGHT VALUES.

Information regarding the value of the freight moved in any locality or on any particular water system has been so often asked for since commencing the preparation of these statistics that a calculation has been effected, in the case of the lake traffic, to secure an estimate of such valuation. This has been moderately practicable, as will be seen in Table 18, because of the record of estimated value kept at the offices of the St. Marys Falls canal, as will be hereafter shown in Table X inserted in the body of the present text. These estimates, which were prepared with much care by General O. M. Poe, United States Army Corps of Engineers, cover most of the principal commodities, and by applying them to the commodity tables of the lake traffic it has been found that the 27,394,767 tons constituting the total of the cargo tonnage shown in Table 16 had a value of $359,482,437, while the addition of the 248,820 tons of unweighed freight, which has been estimated as the proper "cargo tonnage" of the 460,777 tons given in Table 15, will, at an estimate of $60 per ton, raise the total value to $374,411,637. The average estimated value per ton of all commodities, it will be seen, was $13.12, while the range in the estimated values of commodities ran from $3.05, for iron ore, to $155.38 for "other products of mines and quarries". The next highest estimated value of any commodity is that of $100 per ton, for "animal products". The valuation of some one or two other commodities, it will be observed, runs up into very high figures. The lead is taken by lumber, the 6,857,257 tons which were moved during 1889 being set down as worth $70,629,747. Next come the mill products, valued at $49,603,300, and then the wheat, $31,662,131. The coal moved is valued at $21,370,297 and the iron ore at $23,415,176. The claim is not made that these estimates of values are unfailingly exact, but it is believed that they come comparatively close to the actual facts.

EARNINGS AND EXPENSES.

In Table 19 the figures are given which show how the business of transportation by water paid during 1889 for the 1,841 reporting craft. These figures are furnished under the headings of gross earnings, expenses, and net expenses, and all are given for the steam, the sailing, and the unrigged fleets allotted to their ports of registration, with totalized earnings for the lakes, and a summary in which a balance sheet is struck for all classes of craft; while in a supplementary table an estimate is made of the earnings and expenses of the 896 craft not reporting these matters. The summary's figures indicate that the gross earnings of the reporting fleet amounted to $24,369,895, the expenses to $19,443,241, leaving the net earnings at $4,926,654. The largest figures out of this total are for Lake Erie, the gross earnings of its reporting fleet standing at $9,649,090, with expenses of $7,621,541, and net earnings of $2,027,549. The next largest account is that of Lake Huron's fleet, which earned $6,955,133, which paid out $5,349,465 for expenses, and made as net earnings $1,605,668. The third lake fleet in the order of its earnings and expense account was that of Lake Michigan, where the gross earnings were $5,826,148, the expenses $4,843,159, and the net earnings $982,989. So far as ports are concerned, the largest gross earnings were those made by Cleveland's fleet, the figures being $4,344,697 and the expenses $3,441,929, leaving the net earnings at $902,768. The next port in the order of its fleet operations so far as reported was Detroit, the amount being $3,792,600, with $2,812,931 for expenses and $979,669 as net earnings. The third port of importance in this regard was Port Huron, its fleet returns giving $3,162,533 of gross earnings, $2,536,534 of expenses, and $625,999 of net earnings. The gross earnings of Buffalo's fleet were $2,785,853; those of Milwaukee were $2,398,306; those of Chicago were $2,111,312; those of Grand Haven were $1,316,530, and those of Marquette were $1,105,405; the earnings of each of the other places being below $1,000,000.

Out of the totals of the combined fleets the earnings of all the reporting lake steamers amounted to $17,808,329, the expenses to $13,861,485, and the net earnings to $3,946,844. Lake Erie maintains its importance in the returns of the steamers' accounts just as it did in the returns of the entire fleet, the steamers' gross earnings being $7,461,563, their expenses $5,732,426, and their net earnings $1,729,137. Cleveland also retains its relative port importance, the gross earnings of its steamers being $3,215,855, the expenses $2,449,910, leaving the net earnings at $765,945. These net earnings, however, were not so large as those of Detroit's steamers, the sum in that case being $815,357 out of a total gross earnings of $2,945,129. Next to Detroit came Buffalo, the gross earnings of its steamers being $2,368,184 and their expenses $1,834,458, leaving the net earnings at $533,726.

The gross earnings of the entire reporting sailing fleet for all the lakes were $6,480,424, the expenses $5,513,536, and the net earnings $966,888. The same lakes and ports that have been enumerated as controlling the most important financial figures in the reported operations of their entire sailing and steam fleets retained their leading position in the same details of the sailing vessels, and it will be scarcely necessary to quote any figures in evidence.

The earnings of the unrigged amounted to $81,142, the expenses to $68,220, and the net earnings to $12,922. Only 3 ports, it will be observed, made any return for the unrigged, these being Marquette, Buffalo, and Ogdensburg. The unrigged account is in fact not altogether satisfactory, the two great difficulties in securing reports being that the most of the unrigged were mainly employed on the canals opening onto the lakes and their operations have been, whenever possible, covered in the report on canals; and, in the next place, the expense account of the unrigged was in many cases included in the accounts of the steamers supplying the motive power.

The supplementary table for the 896 craft not reporting earnings and expenses shows the estimate of gross earnings to be $11,093,957, that of expenses $8,448,811, leaving the net earnings at $2,645,146, and these figures added to those of the craft actually reporting would raise the probable gross earnings of the whole operating fleet of the Great Lakes to $35,463,852, the expenses to $27,892,052 and the net earnings to $7,571,800.

EXPENSE DETAILS.

In Table 20 the total amount of reported expenses, $19,443,241, is reduced to the principal items making it up. These items are port charges, wages, provisions, current repairs, fuel (for the steamers), commissions, insurance, taxes, and office expenses, together with the two entries giving what other running and shore expenses may not have been included in the list of items just quoted. These items of expenses are distributed among the steam, sail, and unrigged craft of each port of registration, with totals for the lakes and a summarized presentation of the same items of expenses for all the fleets. Many interesting lessons are to be learned from a consideration of these analyses of expenses. By far the largest item was that of wages, the figures being $5,676,802, of which amount $4,235,980 were paid on board the steamers and $1,422,957 on board the sailing vessels. Out of the total wages Cleveland paid $652,146 to steamer hands and $223,576 to the crews of sailing vessels, while Detroit shipowners paid out $626,589 to the officers and crews of steamers and $139,746 for wages on board sailing vessels. The wage account of the Buffalo steamers footed up to $533,468, that of its sailing vessels reaching only $70,424, while the steamer wages at Port Huron amounted to $479,292 and the sailing vessel wages to $230,201.

The next largest item of expense was that of fuel, the cost of which amounted to $2,975,915. Current repairs cost $1,681,694, $1,158,494 being expended on steamers and $522,557 on sailing vessels. Provisions cost $1,322,925, the steamers' portion of that expense being $990,678 and the sailing vessels' part being $328,207; port charges for the fleets for all the lakes amounted to $895,140, close to which stands the item of insurance, $885,303. The commissions amounted to $158,863, taxes to $138,773, and the office expenses to $235,085. There is material in Table 20 for many calculations which would be of especial interest to shippers, such, for example, as the relation of certain items of expense to certain classes of vessels in different localities, together with others which will suggest themselves to the practical reader.

The supplementary table for the 896 craft not reporting details of expenses gives a very interesting analysis in estimate of the $8,448,811 which form the total estimated expenses of the nonreporting contingent of the lake fleet, and by adding these estimates to the figures actually given the probable totals in the items of port charges, wages, provisions, current repairs, fuel, commissions, insurance, taxes, and other running and shore expenses will be obtained.

EMPLOYÉS AND WAGES.

In much the same way that the grand total of expenses given in Table 19 was divided into a number of items in Table 20, so the grand total of wages which formed one of the leading items in Table 20 is analyzed in Tables 21 and 22, which treat of the monthly wages of all classes of employés. Of these employés the steamer list embraces captains, first and second mates, clerks, first and second engineers, wheelmen, lookouts, watchmen, cooks and assistant cooks, seamen, deck hands, firemen, stewards, waiters, boys, chambermaids, porters, and musicians; the sailing vessel list embraces captains, first and second mates, cooks, seamen, boys, and watchmen; and the unrigged craft list includes captains, mates, cooks, and seamen. The number of each class of employés for all fleets is given by ports, lakes, and in a comprehensive total. From this latter it is seen that on all the lakes the list of employés, their number, aggregate monthly payments, and the average monthly wages for the 1,841 reporting craft were as given in Table C, on the following page.

TABLE C.—STATEMENT SHOWING THE NUMBER OF ALL EMPLOYÉS CONSTITUTING THE ORDINARY CREWS OF 1,841 REPORTING VESSELS ON THE GREAT LAKES AND ST. LAWRENCE RIVER, TOGETHER WITH THEIR AGGREGATE AND AVERAGE MONTHLY WAGES.

EMPLOYÉS.	Number employed.	Aggregate of wages for one month.	Average monthly wages.
Total	15, 761	$769, 047	$48. 79
Captains	1, 837	175, 799	95. 70
First mates	1, 214	74, 471	61. 34
Second mates	471	26, 304	55. 85
Clerks	117	7, 751	66. 25
First engineers	1, 067	93, 193	87. 34
Second engineers	597	37, 159	62. 24
Wheelmen	1, 040	37, 452	36. 01
Lookouts	565	19, 078	33. 77
Watchmen	505	16, 633	32. 94
Cooks	1, 387	60, 794	43. 83
Assistant cooks	306	6, 419	20. 98
Seamen	2, 444	93, 255	38. 16
Deck hands	2, 278	53, 992	23. 70
Firemen	1, 463	53, 411	36. 51
Stewards	75	4, 457	59. 43
Waiters	215	4, 395	20. 44
Boys	34	622	18. 29
Chambermaids	49	1, 097	22. 39
Porters	89	2. 245	25. 22
Musicians	8	520	65. 00

In explanation of the apparently high wages paid in the business of the lake traffic, which the preceding and succeeding tables show, attention should be called to the fact that the season of employment on the Great Lakes never includes the winter months, and, that, therefore, any computation of annual wages can only be based upon the 7 or 8, or, at the most, 9 months of open water. From summary Table C it is also seen that the number of persons making up the ordinary crews of the 1,841 reporting vessels was 15,761, of which number (see Table 22) 832 belonged to Lake Superior, 4,278 to Lake Huron, 4,503 to Lake Michigan, 5,430 to Lake Erie, 476 to Lake Ontario, and 242 to St. Lawrence river. The number of persons who received employment on these vessels during the year, however, was much larger, the total being 28,295, of which total 1,469 belonged to Lake Superior, 6,853 to Lake Huron, 8,474 to Lake Michigan, 10,298 to Lake Erie, 615 to Lake Ontario, and 586 to St. Lawrence river. The total monthly account of the wages paid to the officers and crews given in the foregoing statement stands at $769,047, of which amount $43,514 were paid to officers and crews on Lake Superior, $195,894 to those on Lake Huron, $233,630 to those on Lake Michigan, $264,083 to those on Lake Erie, $21,849 to those on Lake Ontario, and $10,077 to those on the St. Lawrence river. The average rate of wages has also been worked out in all of these tables, and when they are calculated from the lake totals it is remarkable how little variation appears. The highest average rate of wages per month for the whole body of reported employés making up ordinary crew is $52.30 for Lake Superior, while the lowest is $41.64 on St. Lawrence river, between which come $51.88 for Lake Michigan's average, $48.63 as that of Lake Erie, $45.90 as that of Lake Ontario's employés, and $45.79 as that of the Lake Huron contingent, the average for the whole system of lakes being $48.79, which is, as it will be observed, very close to that of Lake Erie's average.

So far as the list of the steamer crews is concerned, with their numbers, class, and aggregate monthly wages, the figures are as follows:

TABLE **D.**—STATEMENT SHOWING THE NUMBER OF ALL EMPLOYES CONSTITUTING THE ORDINARY CREWS OF 1,072 REPORTING STEAMERS ON THE GREAT LAKES AND ST. LAWRENCE RIVER, TOGETHER WITH THEIR AGGREGATE AND AVERAGE MONTHLY WAGES.

EMPLOYÉS.	Number employed.	Aggregate of wages for one month.	Average monthly wages.
Total	11, 159	$554, 907	$49. 73
Captains	1, 069	116, 678	109. 15
First mates	577	41, 289	71. 56
Second mates	339	19, 663	58. 00
Clerks	117	7, 751	66. 25
First engineers	1, 067	93, 193	87. 34
Second engineers	597	37, 159	62. 24
Wheelmen	1, 040	37, 452	36. 01
Lookouts	565	19, 078	33. 77
Watchmen	503	16, 583	32. 97
Cooks	720	37, 106	51. 54
Assistant cooks	306	6, 419	20. 98
Seamen	52	1, 870	35. 96
Deck hands	2, 278	53, 992	23. 70
Firemen	1, 463	53, 411	36. 51
Stewards	75	4, 457	59. 43
Waiters	215	4, 395	20. 44
Boys	30	549	18. 30
Chambermaids	49	1, 097	22. 39
Porters	89	2, 245	25. 22
Musicians	8	520	65. 00

Allotted to the lake and river steamer fleets, the monthly wage list for these steamers (with the average rate of wages per month) stands as follows:

LAKES AND RIVER.	Total wages paid per month.	Average rate of wages per month.
Total	$554, 907	$49. 73
Lake Superior	36, 479	52. 79
Lake Huron	144, 608	48. 01
Lake Michigan	148, 397	52. 75
Lake Erie	204, 532	48. 72
Lake Ontario	12, 402	46. 80
St. Lawrence river	8, 489	47. 16

The crews of the sailing vessels, with their monthly wage account, are shown in the following list:

TABLE **E.**—STATEMENT SHOWING THE NUMBER OF ALL EMPLOYÉS CONSTITUTING THE ORDINARY CREWS OF 758 REPORTING SAILING VESSELS ON THE GREAT LAKES AND ST. LAWRENCE RIVER, TOGETHER WITH THEIR AGGREGATE AND AVERAGE MONTHLY WAGES.

EMPLOYÉS.	Number employed.	Aggregate of wages for one month.	Average monthly wages.
Total	4, 541	$212, 058	$46. 70
Captains	757	58, 426	77. 18
First mates	632	32, 952	52. 14
Second mates	132	6, 641	50. 31
Cooks	660	23, 547	35. 68
Seamen	2, 354	90, 369	38. 39
Boys	4	73	18. 25
Watchmen	2	50	25. 00

Allotted to the lake and river sailing vessel fleets, the monthly wage list (with the average rate of wages per month) would be as follows:

LAKES AND RIVER.	Total wages paid per month.	Average rate of wages per month.
Total	$212,058	$46.70
Lake Superior	6,669	49.77
Lake Huron	51,286	40.51
Lake Michigan	85,233	50.43
Lake Erie	58,876	48.34
Lake Ontario	9,447	44.77
St. Lawrence river	547	24.86

The items of the wage account of the crews belonging to reporting unrigged craft may be summarized as follows:

EMPLOYÉS.	Number employed.	Aggregate of wages for one month.	Average monthly wages.
Total	61	$2,082	$34.13
Captains	11	695	63.18
Mates	5	230	46.00
Cooks	7	141	20.14
Seamen	38	1,016	26.74

The supplementary statement for the 896 craft not reporting crews and wages shows the estimated number of men on these vessels to be 6,965, to whom, on the basis of the rates reported on, there were paid $317,138 as the aggregate of wages for 1 month. Accepting the sum of these 2 tables as the probable account of crews and wages for all the operating lake fleets, it would seem that the total number employed was 22,726, their aggregate wages for 1 month being $1,086,185.

FUEL ACCOUNT.

An itemization has been made of the fuel account in Table 23, wherein are set down the accounts of coal and wood burned by the 1,072 reporting steamers during the operating year of 1889, together with the cost of the fuel. As was seen when considering Table 20, the cost of the fuel figured as an item of the expense account to the extent of $2,975,915. The material costing this consisted of 1,118,677 tons of coal and 62,319 cords of wood. The greatest reported consumption of coal was on Lake Erie, where 497,268 tons were burned, costing $1,333,833; on Lake Huron 324,209 tons were burned, costing $745,130, and on Lake Michigan 205,591 tons of coal were burned. Wood was only reported as having been burned to any extent on Lake Michigan, where 60,843 cords were used; the other two localities reporting the consumption of wood for fuel being Lake Superior, with 1,100 cords, and St. Lawrence river, with 376 cords.

The supplementary report for the 395 steamers not reporting fuel gives an estimate of 412,320 tons of coal and 22,969 cords of wood burned, valued at $1,096,536; which figures added to those actually reported give a total fuel account of 1,530,997 tons of coal and 85,288 cords of wood, the whole valued at $4,072,451.

COMPARATIVE STATISTICS.

In considering the comparative statistics embraced in Tables 24 to 32, inclusive, it must be remembered that the figures are drawn from two different sources, according to the condition of the data. Thus the first 4 tables are made up from the information which was presented in the transportation volume of the Tenth Census compared with such totals drawn from the report of the present census as could be presented in exact juxtaposition. The only branch of transportation on the Great Lakes which the report of the Tenth Census touched upon was that conducted by steamers, so that the tabulation of comparative statistics based on the census figures was necessarily restricted to the operations of this class of craft, and to such entries of equipment, operations, and expenses as formed the subject of the inquiry by both the Tenth and Eleventh Censuses.

In this connection the following extract from the report on transportation by the Tenth Census may be pertinently quoted:

> ### THE LAKES IN 1880.
>
> On the northern lakes, embracing the steamboat interests of states and parts of states tributary to these waters, but excluding Lake Champlain, there were at the close of the census year 947 steamers of all classes, measuring 222,290.45 tons, valued at $13,918,925, with $16,978,108 of capital invested. They gave employment to 9,143 men, and there were paid for services $3,293,964, making an average of $360.27 per man, exclusive of shore help. The passenger movement, amounting to 1,356,010 persons carried, may be divided

into 926,250 regular and excursion passengers and 429,760 ferry passengers, not including the transfers of the Canada Southern Bridge Company at Stony Island, near Detroit, with one of their boats an American bottom. The freight movement reached 4,368,171 tons, exclusive of lumber carried, which approximated 318,889,000 feet. The lumber that was towed during some stage in its journey from the forest and mill to the manufactory would include a large share of the 4,497,211,000 feet cut on the upper and lower peninsula of Michigan, as well as a large portion of the lumber production of Wisconsin. * * * Employed in this line of traffic there were some 70 steamers, measuring 23,300.84 tons, and valued at $1,302,500, engaged in carrying this production. In the grain trade the number of steamers approximated 67, measuring 80,669.12 tons, and valued at $4,777,700, and in the ore trade there were some 38 steamers, measuring 36,145.93 tons and valued at $1,750,500. * * *

The fuel consumed by the steamers on the northern lakes was reported at 488,610 tons of coal and 255,629 cords of wood, the latter consisting largely of slabs and poor grades of wood and refuse used in the towing steamers in the lumber regions of Michigan and Wisconsin. The coal consumed was largely of the bituminous variety, mined in southern and central Ohio. * * *

Of the 947 steamers owned on the northern lakes, 141 were passenger steamers, measuring 56,471.26 tons and averaging 400.50 tons each; 28 ferry steamers, measuring 3,624.26 tons and averaging 129.43 tons each; 202 freight steamers, measuring 139,154.16 tons and averaging 688.88 tons; 426 towing steamers, of 20,274.95 tons, with an average of 47.59 tons; and 150 yachts, measuring 2,765.82 tons and averaging 18.44 tons. In 1851 the average tonnage of steamers on the northern lakes was given at 437 tons. The increase in the number of tugs and yachts since that date has reduced their average to 235 tons at the present time. The maximum tonnage in 1880 was 2,082 tons, while the maximum of actual carrying capacity was about 2,400 tons.

LESSONS OF COMPARISON.

So far as Table 24 goes, it might form the basis of much interesting speculation, but all that it is necessary to indicate at present is the fact that in 1880 the lake fleet of steamers numbered 947, with a tonnage of 222,290 tons and an estimated commercial value of $13,918,925, and that in 1889 the lake fleet of steamers numbered 1,467, had a tonnage of 595,013 tons, and was valued at $40,868,824. The classification of the fleets for both years has been made by passenger and freight carrying boats, ferryboats, towing and harbor boats, and miscellaneous craft. In all of these classes, with the exception of the miscellaneous, it will be observed there has been a steady and well-defined increase, and the only reason that this is not marked in the miscellaneous class is because in the entry of 1880 there were included a number of steam canal boats that were omitted from that of 1890. It has been said that the increase in the 2 years of report is a steady and well-defined one, but it will be observed that there is an apparent lack of ratio between the number of the passenger and freight boats on the one hand and the increase of their tonnage and value on the other, for while the increase in the number of the steamers is at the rate of 132.65 per cent, the increase in the tonnage stands at 186.34 per cent, and that of value at 228.87 per cent. The explanation of the apparently undue increase in tonnage and value lies in the fact that the passenger and freight steamers which are being turned out from the lake shipyards are yearly becoming larger and more expensive, a subject concerning which much more is said under the head of "Comparative record of shipbuilding".

EARNINGS AND WAGES.

Only the gross earnings are given in Table 25, because in the investigation of 1880 only these were asked for, and it was not possible to make up a balance sheet owing to the absence of any figures of expenses, and only the total for all the lakes is published because of the fact that in 1880 the returns were made by states, while in 1889 they were made by lakes. This unfortunately does away with the possibility of a comparison by localities, and all that can be shown or said is that in 1880 the gross earnings on all the reporting craft of the Great Lakes amounted to $12,136,228, while in 1889 the sum had risen to $17,808,329, a gross increase of $5,672,101 and an average annual increase of more than $630,000. The amount paid out in wages on reporting vessels in the 2 years is given in Table 25, because it is the only item of expense that can be compared, but a better consideration of it may be had from a study of Table 26. The entry entitled "Total number of men making up the ordinary crews" must be accepted as indicating the total number of men required to work all the reporting craft, and not the total number of men employed during the year. The number of men making up the complement of the crews on reporting vessels in 1880 was 9,143, while in 1889 the number reported was 11,159. To these there was paid out as wages during 1880 $3,293,964, while in 1889 the total wages paid amounted to $4,235,980. The average annual wages per man for the first-mentioned year was $360.27, and $379.60 for 1889, an average increase of wages per man of $19.33.

FREIGHT AND PASSENGER TRAFFIC.

The explanation of the abnormal increase of freight movement for 1889 over that of 1880, as given in Table 27, is a twofold one. In the first place the increase of steamers as freight carrying vessels has been unusually large, the fleet of 1889 (as it will be remembered was shown in Table 24) being more than 100 per cent greater than it was in 1880, while the tonnage had just about trebled. This means that the increase of steamer carried freight would be the largest of any portion of the lake traffic, and if the tonnage of the fleet has increased threefold there is no good reason why the freight movement might not have been increased in the same ratio. The figures of freight movement as given in Table 27, however (4,368,171 tons in 1880 and 20,143,483 tons in 1889), show a more than quadruple increase, and the other part of the explanation is that the means employed to secure a full report in 1889 were further reaching than those which could be availed of in 1880. The increase in passenger movement, it will be observed, while it does not show any such extraordinary accretion, is still a large one, the total movement for 1880 standing at 1,356,010 passengers against 2,235,993 in 1889. These totals were made up of 926,250 regular and excursion passengers and 429,760 ferry passengers carried in 1880 and 1,612,519 regular and excursion and 623,474 ferry passengers carried in 1889.

FLEETS IN 1880 AND 1889.

The comparative statistics found in Table 28 and the 5 following tables have been gathered from the reports of the bureau of navigation. It will be noticed that although the total of the fleet for 1889 is the same in both the reports of the Commissioner of Navigation and the Census, the component parts do not correspond. The two reports stand as follows:

EQUIPMENT.	Census report.	Report of Commissioner of Navigation.
Total	2,737	2,737
Steamers	1,467	1,436
Sailing vessels	962	1,251
Unrigged	308	50

The only difference between these two lists is that of the distribution of the unrigged. If the Commissioner's 50 barges are subtracted from the census 308 unrigged, 258 unrigged will remain to be distributed among the steamers and sailing vessels. Next it will be seen that the census report gives 1,467 steamers, while the Commissioner's is 1,436, which means that the census has grouped 31 more craft under the head of steamers than the Commissioner has done. Adding the extra number of unrigged, 258, to the 31 surplus steamers, a total of 289 is reached, which is exactly the number of sailing vessels required to raise the census 962 to the Commissioner's 1,251. The yearly details afforded in Tables 28, 29, and 30 form an interesting record, but the pith of the subject is found in the recapitulation of the 10 years, wherein the addition of the individual records of the various districts is inserted, the total representing the lake fleet for each of the years in question. No clearer presentation of the gradual change in the class of craft in use on the lakes can be made than is found in this recapitulation, for while the number and tonnage of the entire fleet has risen from 2,487 craft with an aggregate tonnage of 552,342 tons in 1880 to 2,737 craft with an aggregate tonnage of 900,847 tons in 1889, it will be seen that the increase has been made only in the steamer fleet, and that there has been a steady diminution in both the sailing vessels and barges registered in the various ports. The sailing vessels, which numbered 1,415 in 1880, had dropped to 1,332 in 1883 and to 1,251 in 1889. While, however, the number had thus dwindled, the tonnage, it will be seen, displayed an increase, for, although it was 302,265 tons in 1880, it had risen to 322,694 tons in 1889, notwithstanding the fact that the number had decreased. The explanation, of course, lies in the circumstance already alluded to, the increased average tonnage of the vessels built in late years. In the case of the barges, however, the diminution has been a steady one in both number and tonnage. In 1880 the number of registered barges was 160, with a tonnage of 40,612 tons; by 1884 it had dropped to 120, with a tonnage of 33,326 tons, while by 1889 the number had decreased to 50 and the tonnage to 6,948 tons.

SHIPBUILDING RECORDS.

Tables 31 and 32 form a record of shipbuilding for the same 10 years, 1880–1889, that have been used in the 3 preceding tables. Table 31 gives the figures from the yards of each customs district and for the construction of steamers, sailing vessels, and barges; while Table 32 deals only with the steamers built during each of the 10 years, and then considers them under the various methods of propulsion, that is, whether propeller, side-wheel, or stern-wheel. Each table is supplemented by a recapitulation, in which only the totals for the whole lake system are inserted.

A study of Table 31 shows that if arranged in the order of their importance as shipbuilding centers, the different customs districts would stand as is shown in the following table:

TABLE F.—STATEMENT SHOWING THE TOTAL NUMBER OF REGISTERED VESSELS OF ALL CLASSES BUILT IN THE CUSTOMS DISTRICTS OF THE GREAT LAKES AND RIVER ST. LAWRENCE DURING THE YEARS 1880–1889, THE DISTRICTS BEING ARRANGED IN THE ORDER OF THEIR IMPORTANCE.

CUSTOMS DISTRICTS.	Total.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889
Total	1,375	117	175	199	134	110	95	66	117	183	179
Huron	245	21	30	36	24	19	14	9	22	31	39
Michigan	206	23	23	35	20	18	11	13	18	17	28
Milwaukee	182	16	23	28	21	8	15	6	7	30	28
Buffalo creek	180	9	31	23	22	20	8	10	14	23	20
Detroit	156	21	24	23	11	15	9	3	11	19	20
Cuyahoga	123	9	14	18	8	7	4	5	12	23	23
Chicago	64	1	6	15	12	5	8	3	9	3	2
Cape Vincent	41	5	4	3	3	2	10	2	2	6	4
Sandusky	29	3	3	5	1	2	3	5	....	5	2
Superior	28	....	5	4	3	3	1	2	2	5	3
Oswego	25	3	6	1	3	1	....	1	4	5	1
Niagara	23	2	....	3	....	1	1	....	8	7	1
Oswegatchie	20	1	1	1	1	4	5	3	....	3	1
Miami	19	2	3	....	4	2	1	....	....	2	5
Erie	14	....	....	4	....	....	3	1	1	3	2
Genesee	11	1	2	....	....	1	....	2	5	....	....
Duluth	7	....	....	....	1	2	2	1	....	1	....
Dunkirk	2	....	....	....	....	....	....	....	2	....	....

From the preceding summary it is seen that the districts of Huron, Michigan, Milwaukee, Buffalo, Detroit, and Cuyahoga (Cleveland) easily lead. It will be seen, too, that with Detroit as the exception of locality and with the years 1882, 1884, 1885, and 1886 as the exceptions of time, the increase in the shipbuilding records of these leading districts has been a steady one. Contrasting the figures of 1880 and 1889, Huron, for instance, is seen to have gained 18 in her output of vessels, Michigan to have gained 5, Milwaukee 12, Buffalo 11, and Cuyahoga 14. Chicago's shipbuilding record is surprisingly small, and it is only during the past year or two that this city has seriously taken up the industry of construction. The largest record of any one district for any one year in point of number was for Huron, in 1889, when she added 29 steamers of 20,980 tons burden, 9 sailing vessels of 4,306 tons burden, and 1 barge with 174 tons burden to the lake fleet, the total addition being 39 craft, with a tonnage of 25,459 tons. The largest record of any one district for any one year, in point of tonnage, was that of Cuyahoga, in 1889, when she built 23 vessels, with an aggregate tonnage of 31,205 tons, making an average tonnage of 1,357 tons.

To Cuyahoga's shipyards for 1888 must also be credited the second best year's output, the aggregate tonnage of 23 vessels launched in that year rising to 29,786 tons. Next in the order of the year's shipbuilding comes Huron, in 1889, when from the yards of that district there were launched 39 vessels, with a tonnage of 25,459 tons, and next Detroit, for 1889, when 20 vessels were built, with an aggregate tonnage of 22,426 tons. Taking the three years of 1887, 1888, and 1889, it will be seen that during this term shipbuilding on the Great Lakes reached its highest point, the record, as is shown by the subjoined table, being 200 vessels launched, with an aggregate tonnage of 192,281 tons.

TABLE G.—STATEMENT SHOWING THE OUTPUT OF THE THREE LEADING SHIPBUILDING DISTRICTS ON THE GREAT LAKES FOR 3 SELECTED YEARS, TOGETHER WITH THE AVERAGE TONNAGE OF THE VESSELS AND FLEETS.

CUSTOMS DISTRICTS.	Year.	Tonnage.	Number of vessels.	Average tonnage.
Total for 3 districts		192,281	200	961
Cuyahoga	1887	16,351	12	1,363
	1888	29,786	23	1,295
	1889	31,205	23	1,357
Total for Cuyahoga		77,342	58	1,333
Detroit	1887	10,554	11	959
	1888	20,535	19	1,081
	1889	22,426	20	1,121
Total for Detroit		53,515	50	1,070
Huron	1887	13,690	22	622
	1888	22,275	31	719
	1889	25,459	39	653
Total for Huron		61,424	92	668

A column of average tonnage has been inserted in the preceding table, and from the figures there given a very instructive lesson is to be learned. They show, for instance, that the vessels built at Cuyahoga had the highest average tonnage of any vessels built, irrespective of class. That average ran 1,363, 1,295, and 1,357 tons for 1887, 1888, and 1889, respectively, or an average vessel tonnage of 1,333 tons per vessel for the 3 years. This high average vessel tonnage is indeed a characteristic of shipbuilding on the lakes, but is especially characteristic of the new steamer fleets, as will be seen when Table 32 is reviewed.

The account of barge building, as shown in the recapitulation of Table 31, can hardly be regarded as of very much importance, because, as has been elsewhere said, the barges taken account of by the Commissioner of Navigation are only those that are registered, registration being optional with the owner. Still the table, so far as its value for comparative statistics goes, would not be complete without this entry. It is valuable, too, as showing that both in number and tonnage the building of barges, that is, of registered barges, is yearly diminishing; for while in 1881 the account shows the building of 14 barges with an aggregate tonnage of 3,111 tons, in 1889 only 2 were built, with an aggregate tonnage of 247 tons, and in 1884 there was but 1 small barge built.

The fluctuations of the building of sailing vessels is quite clearly shown in the recapitulation of Table 31, and while there was a gradual rise in the statistics of their construction from 47 in 1880 to 66 in 1882, there was a still more strongly marked declension from 1882 to 1886, in which latter year but 15 sailing vessels were built. The last 3 years in the table did not bring the number back to the large figures of 1882, although these years were marked by an unusual activity in the lake yards, the numbers running 34, 42, and 32. It will be noticed, however, that the aggregate tonnage suffered no such decline.

One has to look to the records of steamer building as shown in this recapitulation table (and in a still more condensed form in the accompanying summary) for the explanation of the increased importance of this branch of the shipbuilding industry.

TABLE H.—SUMMARY SHOWING THE NUMBER AND GROSS TONNAGE OF STEAMERS BUILT ON THE GREAT LAKES AND RIVER ST. LAWRENCE FROM 1880 TO 1889, INCLUSIVE.

YEARS.	Number.	Gross tonnage.
1880	63	14,106.46
1881	109	49,080.21
1882	128	33,596.45
1883	100	17,253.42
1884	80	20,205.69
1885	64	20,228.52
1886	46	12,610.73
1887	75	47,183.46
1888	139	86,715.98
1889	145	93,706.73

The peculiarity of the steamer-building record, it will be seen, is that, notwithstanding the lack of any uniform increase in number, the tonnage shows a steady rise. Thus, while in 1881 the steamers built numbered 109, their tonnage being 49,080 tons, in 1888 the number of steamers built was 139, but the aggregate tonnage had risen to 86,716 tons; and while in 1882 the number of steamers was 128 as against 145 for 1889, the tonnage of the steamers built in the first year was 33,596 tons as against 93,707 tons for the latter year. Reduced to the common denomination of average tonnage, these figures of comparison mean that in 1882 the average tonnage of the steamers built was 262.47 tons and that in 1889 the average tonnage of the steamers built was 646.25 tons. When, too, the calculation is made one of percentage, it is found that while the percentage of number showed an increase for 1889 over 1882 of 13.28 per cent, the percentage of tonnage showed an increase for 1889 over 1882 of 178.92 per cent.

METHODS OF PROPULSION.

Further evidence of a continued alteration in the condition of affairs is found in Table 32, wherein a division is made of all the steamers built during the 10 years 1880–1889 into the 3 classes of propulsory power, propeller, side-wheel, and stern-wheel. It will hardly be necessary to make any analysis of the yearly tables wherein the individual entries of the different districts are set down, although the story told there is an interesting one in many particulars, while by turning to the recapitulation the relative favor and use of the different classes may be seen at a glance. During the 10 years but 15 stern wheelers, having a tonnage of 2,696 tons, were built, while in the same period 889 propellers were built, with an aggregate tonnage of 367,275 tons. The side wheelers maintained their position with some firmness, although the difference between the 18 vessels which were built in 1882 and the 6 which were built in 1889 can not fail to be marked.

The popularity of the propeller is unquestioned and unmistakable, and even when a comparison is made between the 2 years of 1881 and 1882 with 1888 and 1889, these being the 4 years of the greatest activity, the increase for the 2 latter years, especially in tonnage, is certainly remarkable. The output of the different localities, so far as the number of steamers built goes, is set down in the following summary:

TABLE J.—STATEMENT SHOWING THE NUMBER OF PROPELLERS, SIDE-WHEEL, AND STERN-WHEEL STEAMERS BUILT IN THE CUSTOMS DISTRICTS OF THE GREAT LAKES AND RIVER ST. LAWRENCE DURING THE YEARS 1880–1889, INCLUSIVE.

CUSTOMS DISTRICTS.	Propellers.	Side wheel.	Stern wheel.
Total	889	45	15
Oswegatchie	14		
Cape Vincent	19	2	
Oswego	18		
Genesee	[illegible]	2	
Buffalo creek	160	3	
Cuyahoga	89	13	3
Sandusky	15	3	2
Miami	12	1	1
Detroit	103	7	
Huron	126	1	
Michigan	133	1	7
Chicago	45	1	
Milwaukee	100	9	2
Superior	13		
Niagara	17		
Erie	13	1	
Duluth	2	1	
Dunkirk	2		

MAGAZINE STATEMENTS.

The relative favor and use of the different classes of steamers may be easily gathered from the preceding table. Concerning the changes which have marked the history of construction of the whole lake fleet, Lieutenant Charles C. Rogers, United States Navy, says, in an article recently published in Scribner's:

> The history of marine architecture does not furnish another instance of so rapid and complete a revolution in the material and structure of floating equipment as has taken place on the Great Lakes since 1886. In that year the total valuation of the vessels by Lloyds was about $30,600,000. In 1889 60 new steamers and 11 sailing vessels, aggregating 70,000 tons and valued at $6,650,000, were added to the fleet. During the 4 winters of 1886–1890 the tonnage of the lakes was nearly doubled, 206 vessels, measuring 399,975 tons, were turned out of the shipyards, with a valuation of $27,389,000. During the same time the number of steamers of more than 1,500 net register tons increased from 21 to 110. The two valuations of the fleet already presented differ by more than $9,000,000, but either one emphasizes the fact of the very recent and extraordinary growth of this commerce and renders it difficult to predict the increase in the tonnage and the size of vessels upon the lakes during the few years that remain till the opening of the next century. * * * The sailing vessel has almost disappeared from the lakes; the square-rigged ship is no longer seen, and only a few of the great cargo-carrying schooners are left. The sailing fleet was succeeded by the propellers, * * * with its tow of one or more consorts, and it in turn is giving way to the modern steamer, maintained at a little more than one-half the cost, while having a carrying capacity quite as great, a speed double that of the propeller and consort, and making two or three round trips for one of the tow. * * * The shipbuilders of the lakes are progressive, and keep pace with all improvements in marine architecture. Steel vessels are built with

double bottoms, water-tight compartments, triple expansion engines, and modern electrical and steam appliances. The structural strength may be realized from the fact that a large proportion are built for the trade in iron ore. At a time trial at Escanaba, during the summer of 1887, a steamer was loaded with over 2,000 tons of ore and steamed away from the dock in 45 minutes after being placed under the chutes. The record shows that another vessel was loaded with 2,800 tons of coal in 1 hour and 50 minutes; 300 tons for fuel were put on board in another hour; so that in 2 hours and 50 minutes after opening the hatches the vessel was loaded and coaled. That ordinary seagoing ships will not stand the strain of this traffic is demonstrated by the fact that 4 steel steamers built on the Clyde for Canadian owners had to be repaired and strengthened throughout after one season's work to fit them for further service. These vessels steamed across the Atlantic, were cut into halves on the lower St. Lawrence, the sections being then towed through the canals and put together on the lakes. 2 more were built on the Clyde, with the benefits of this experience and of the builder's visits to our northwestern shipyards. * * * The record of large cargoes is equally creditable. The Maryland, belonging to the Interocean Transportation Company of Milwaukee, has carried 3,737 net tons of ore from Escanaba to South Chicago on a draft of 16.5 feet; the E. C. Pope, owned by Eddy Brothers, of Bay city, transported 3,628 net tons from Escanaba to Buffalo on 16 feet draft, and 3,167 tons from Ashland to Lake Erie, drawing 14.5 feet. * * * In the Cleveland shipyards were built the magnificent iron and steel fleets of the Northern Steamship Company, the Mutual Transportation line, and the Minnesota Iron Company of Chicago, costing $200,000 each; those of the Western transit line of the New York Central railroad, the equals in speed, style, and carrying capacity to any ocean vessel, and the 5 passenger steamers of the Detroit and Cleveland Steam Navigation Company, costing as high as $350,000 each, and ranking among the finest passenger boats in the country. From the shipyards of Chicago steel steamers of 4,000 to 5,000 tons displacement have been launched. 5 large steamer lines ply regularly to ports on lakes Erie, Huron, Superior, and Michigan, with a combined fleet of over 60 steamers and a capacity ranging from 1,750 tons to more than 3,000 tons. The Union Steamboat Company owns the Oswego and Chemung, the largest steamers of the lakes, with 4,800 tons displacement and a total cost of $560,000; and it was on these lakes that the whaleback was first put to running.

FIGURES FROM LLOYDS.

In addition to the comparative statistics which have been collated from the census returns for 1880 and 1890 and from the data collected by the Commissioner of Navigation, a third series has been compiled from Lloyds Inland Register for the years 1886, 1887, 1888, 1889, and 1890. A bulletin giving these figures in detail was prepared by Mr. Charles H. Keep, under the direction of Professor Henry C. Adams, and was issued in February, 1891; but in view of the fact that the statistics in question cover but 6 years out of the decade and that the comparative statistics secured from the other sources just referred to are so much more comprehensive, it will be scarcely necessary to do more than to present a résumé containing the salient facts of the tables given in the bulletin in question.

Before considering these tables the reader should be notified that barges are included under the head of sailing vessels, and that no comparison between the totals secured from Lloyds and those from other sources can be effected owing to the fact that the Register only takes cognizance of certain craft, while so far as the values go those quoted by Lloyds are plainly excessive:

TABLE **K.**—STATEMENT SHOWING THE COMPARATIVE STATISTICS OF THE NUMBER, TONNAGE, AND VALUE OF THE FLOATING EQUIPMENT OF THE GREAT LAKES AND RIVER ST. LAWRENCE, DRAWN FROM LLOYDS REGISTER FOR THE YEARS 1886, 1887, 1888, 1889, AND 1890.

CLASSIFICATION OF VESSELS.	1886			1887			1888			1889			1890		
	No. of vessels.	Net tonnage of vessels.	Valuation of vessels.	No. of vessels.	Net tonnage of vessels.	Valuation. of vessels.	No. of vessels.	Net tonnage of vessels.	Valuation of vessels.	No. of vessels.	Net tonnage of vessels.	Valuation of vessels.	No. of vessels.	Net tonnage of vessels.	Valuation of vessels.
Total	1,997	634,652	$30,597,450	1,829	606,353	$35,634,950	1,884	657,723	$42,210,200	1,947	753,819	$49,957,550	2,055	826,360	$58,128,500
A—Structure:															
Side-wheel steamers	43	14,150	1,494,500	38	13,692	1,637,000	36	13,742	1,609,500	39	16,443	2,163,000	42	16,949	2,209,500
Propellers under 1,000 tons	335	177,402	9,475,100	354	125,057	10,149,100	379	129,744	11,353,300	409	149,793	12,652,800	431	154,232	13,905,600
Propellers between 1,000 and 1,500 tons.	72	86,728	5,935,000	92	112,968	8,841,000	105	129,410	10,246,000	116	144,513	11,379,000	122	151,611	11,804,000
Propellers over 1,500 tons	21	34,868	2,645,000	31	51,761	4,085,000	46	78,103	6,923,000	75	130,235	11,802,000	110	188,390	17,737,000
Tugs	466	11,737	2,497,600	424	10,847	2,378,400	423	11,371	2,439,100	426	12,323	2,703,750	448	12,520	2,778,250
Schooners	730	183,792	5,398,850	587	166,167	4,972,050	582	164,240	5,691,800	580	164,285	4,947,500	577	158,620	4,726,150
Barges	330	125,975	3,151,400	303	125,861	3,572,400	313	131,113	3,947,500	302	136,227	4,309,500	325	144,038	4,968,000
B—Material:															
Steel	6	6,459	694,000	11	14,134	1,654,000	23	31,928	3,925,000	41	49,784	7,324,500	68	99,457	11,964,500
Iron	35	22,714	2,675,000	87	23,464	2,815,000	39	24,940	2,765,000	34	24,450	2,608,500	39	24,673	2,638,000
Composite	2	63	39,000	4	2,391	319,000	7	5,178	579,000	9	9,996	1,079,000	13	13,554	1,465,000
Wood	1,954	605,416	27,189,450	1,777	566,364	30,846,950	1,815	595,677	34,941,200	1,863	669,589	38,945,550	1,935	688,676	42,061,000
C—Sail or steam:															
Steam vessels	937	324,885	22,047,200	939	314,325	27,090,500	989	362,370	32,570,900	1 065	453,307	40,700,550	1,153	523,702	48,434,350
Sailing vessels	1,060	309,767	8,550,250	890	292,028	8,544,450	895	295,353	9,639,300	882	300,512	9,257,000	902	302,658	9,694,150

CHANGES IN EQUIPMENT.

In the text of Bulletin No. 29, Professor Adams said:

> It would be difficult to add anything to the impression which a study of the preceding figures must produce. There are, however, certain facts to which it may not be inappropriate to call particular attention.
>
> First. The figures presented in the tables show that sailing vessels are fast giving place to vessels propelled by steam. Taking schooners and barges together, and comparing the figures for 1886 and 1890, it appears that there has been a decrease of 14.91 per cent in number, 2.29 per cent in tonnage, and 13.38 per cent in value. Taking schooners and barges separately, the greater decrease is in schooners. Thus, although there is an actual decrease in the number of barges in 1890 as compared with those of 1886, there is an increase of 14.34 per cent in the tonnage of this class of vessels. These facts indicate an increased use of steam both for immediate propulsion and for towing.
>
> Second. The figures show that steam vessels which have been built during the last 4 years are of a constantly increasing size. In 1886 there were but 21 propellers of over 1,500 tons burden, in 1890 there were 110 propellers of this class. But the tonnage of vessels of this class has increased more rapidly than their number. Thus the total tonnage of the 21 vessels of over 1,500 tons burden in 1886 was 34,868 tons, while the total tonnage of the 110 vessels in 1890 was 188,390 tons; that is to say, the percentage of increase in the number of vessels is 423.81, while the percentage of increase in tonnage is 440.29. The total value of this class of vessels in 1886 was $2,645,000, in 1890 it was $15,000.092, showing an increase for the 4 years of 570.59 per cent. A comparison similar to this for any of the classes of vessels, when taken in connection with well-known facts relative to the ownership of these large vessels, clearly shows that the traffic of the Great Lakes is rapidly coming under the control of companies having at their command large capital.
>
> Third. The same conclusion may be arrived at if the changes in the material made use of in the building of new vessels are considered. Steel is more generally used for large vessels than iron, composite, or wood. In 1886 there were but 6 steel vessels afloat on the lakes, with an aggregate tonnage of 6,459 tons and an aggregate value of $694,000. If by the side of these figures are placed the corresponding data for the year 1890, it appears that there are now 68 steel vessels afloat on the lakes, with an aggregate tonnage of 99,457 tons and an aggregate value of $11,964,000. This shows an increase in number of vessels of 1,033.33 per cent, in tonnage of 1,439.82 per cent, and in valuation of 1,623.99 per cent. Iron and wooden vessels have barely held their own during these years. Vessels built of composite, on the other hand, show a marked increase, both in number, tonnage, and value. These facts indicate that a new factor is being introduced into the problem of transcontinental transportation.

THE THREE CANALS.

The comparative statistics furnished in the 3 series of tables which have just been reviewed are important and valuable as showing how steady and rapid the growth of trade has been on all the lakes, treated as a system, but it may be stated without any attempt at discrimination that the development of Lake Superior's commerce has been exceptionally remarkable. This has been undoubtedly due, in a very large part, to the opening of the St. Marys Falls canal, and it will be quite in keeping with the plan of the text to consider at this point the results which have attended the inception and extensions of this passageway between the "Brother to the Sea" and the lower lakes, and then to somewhat more briefly consider the returns of the other 2 statistical keys to the commerce of the Great Lakes, the Detroit river and canal and the Welland canal.

THE ST. MARYS FALLS CANAL.

Long after a population had moved into the states and territories bordering on the other lakes of the system Lake Superior was unknown and unexplored. "For two centuries", says General Poe, "this greatest of all inland seas lay in distant isolation enfolded by a wilderness, the coming civilization heralded only by the missionary and fur trader coasting along its silent shores". The mineral treasures in this "enfolding wilderness", originally drew the explorer up the St. Marys river, but it was not until in 1855, when the canal and first lock at St. Marys were completed, that the commerce of Lake Superior can be said to have had any appreciable existence. It will not be necessary to follow the growth of the commerce through the canal year by year, but taking the traffic report from 1881, at which date the new and larger lock was constructed, it is seen that in 1882 there passed the canal 2,029,000 tons of freight, in 1883 there were 2,267,000 tons; in 1885 these figures had risen to 2,356,000 tons, in 1886 to 4,527,750 tons, in 1887 to 5,494,649 tons; that in 1888 the figures passed the six-million limit, standing at 6,411,423 tons; that in 1889 they were 7,516,022 tons, and that in 1890 they had risen to 9,041,213 tons, a record of increase in traffic which is certainly unparalleled.

Taking up the subject in a somewhat more detailed form, a treatment which the importance and pertinency of the subject merits, it is found that the canal for 1889 was open to navigation 234 days, the first vessel having passed April 15, and the last December 4, 1889, thus making the season 22 days longer than that of 1888. The average number of vessels passing per day for the whole season was 40.9, and for the months of June, July, and August, 50. The number of vessel passages of all classes exceeded that of the preceding season by 1,776, or a little less than 23 per cent. The increase in the freight movement for 1889 over that of 1888 was 1,104,599 tons, or 17 per cent, while the increase in registered tonnage was 2,091,276 tons, or 41 per cent. This wide discrepancy was due to the low stage of water, which did not permit vessels to carry full loads. Tables L, M, and N, on the following page, show these facts, as well as furnish a comparative statement of the amount and value of commerce passing through the canal for the calendar years 1888 and 1889.

TABLE L.—STATEMENT SHOWING THE INCREASE IN THE DETAILS OF BUSINESS DONE AT THE ST. MARYS FALLS CANAL IN 1888 AND 1889.

ITEMS.	Unit of fact.	NUMBER AND AMOUNT.		INCREASE.	
		1888	1889	Number and amount.	Per cent.
Vessels	Number	7, 803	9, 579	1, 776	23
Lockage	Number	3, 845	4, 684	839	22
Tonnage, registered	Net tons	5, 130, 659	7, 221, 935	2, 091, 276	41
Tonnage, freight	Net tons	6, 411, 423	7, 516, 022	1, 104, 599	17
Passengers	Number	25, 558	25, 712	154	1

TABLE M.—STATEMENT SHOWING THE INCREASE AND DECREASE IN THE AMOUNT OF THE VARIOUS COMMODITIES PASSING THE ST. MARYS FALLS CANAL DURING 1888 AND 1889.

ITEMS.	Unit of measurement.	QUANTITY.		INCREASE.		DECREASE.	
		1888	1889	Amount.	Per cent.	Amount.	Per cent.
Coal (hard and soft)	Net tons	2, 105, 041	1, 629, 197			475, 844	23
Flour	Barrels	2, 190, 725	2, 228, 707	37, 982	2		
Wheat	Bushels	18, 596, 351	16, 231, 854			2, 364, 497	13
Other grain	Bushels	2, 022, 308	2, 133, 245	110, 937	5		
Manufactured iron	Net tons	48, 859	31, 545			17, 314	35
Pig iron	Net tons	14, 844	26, 016	11, 172	75		
Salt	Barrels	210, 433	168, 250			42, 183	20
Copper	Net tons	28, 960	33, 456	4, 496	16		
Iron ore	Net tons	2, 570, 517	4, 095, 855	1, 525, 338	59		
Lumber	M. ft. B. M	240, 372	315, 554	75, 182	31		
Silver ore and bullion	Net tons	3, 385	5, 947	2, 562	76		
Building stone	Net tons	33, 541	33, 538			3	
Unclassified freight	Net tons	345, 854	312, 410			33, 444	10

TABLE N.—STATEMENT SHOWING THE INCREASE AND DECREASE IN THE VALUE OF THE VARIOUS COMMODITIES PASSING THE ST. MARYS FALLS CANAL DURING 1888 AND 1889.

ITEMS.	Unit of measurement.	Price per unit.	TOTAL VALUATION.		Increase in value.	Decrease in value.
			1888	1889		
Coal	Net tons	$3. 50	$7, 367. 644	$5, 702, 190		$1, 665, 454
Flour	Barrels	5. 00	10, 953, 625	11, 143, 535	$189, 910	
Wheat	Bushels	0. 98	18, 224. 424	15, 907, 217		2, 317, 207
Other grain	Bushels	0. 98	1, 981. 862	2, 090, 580	108, 718	
Manufactured iron	Net tons	50. 00	2, 442, 950	1, 577, 250		865, 700
Pig iron	Net tons	17. 00	252, 348	442, 272	189, 924	
Salt	Barrels	1. 00	210, 433	168, 250		42, 183
Copper	Net tons	200. 00	5, 792, 000	6, 691, 200	899, 200	
Iron ore	Net tons	3. 50	8, 996, 810	14, 335, 493	5, 338, 683	
Lumber	M. ft. B. M	18. 00	4, 326, 696	5, 679, 972	1, 353, 276	
Silver ore	Net tons	153. 79	520, 579	914. 589	394, 010	
Building stone	Net tons	10. 00	335, 410	335, 380		30
Unclassified freight	Net tons	60. 00	20, 751, 240	18, 744, 600		2, 006, 640
Total			82, 156, 021	83, 732, 528	8, 473, 721	6, 897, 214
Net increase					1, 576, 507	

QUANTITIES AND VALUES.—It will be observed that the increase in the amount of iron ore transported in 1889 over that transported in 1888 was no less than 1,525,338 tons, figures which are actually greater than the total increase of freight moved during the season, that increase being 1,104,599 tons. The figures 1,525,338 tons are, however, diminished or offset by a decrease in both the coal and wheat traffic. The decrease in the coal traffic amounted to 475,844 tons, or 23 per cent, and was probably owing to a lighter demand for the mineral, due to the preceding mild winter. It should be stated that in the valuations which are put on the freight the same prices per unit are employed for both the years 1888 and 1889, as it is believed that this method affords a better basis for comparing the business year by year than if the prices were amended to conform to each annual quotation.

The total number of vessels, 9,579, which is set down as the record of those passing through the canal in 1889, includes 6,501 steamers, 2,635 sailing vessels, and 443 unregistered craft in tow.

The unclassified freight, it will be observed, has been brought down to 4 per cent of the total freight movement, and even this small percentage may be reduced by the statement that it includes 2,946 tons of wool and 304 tons of hides.

No returns had been received up to the time of writing of a sufficiently recent date to be available for the construction of a detailed comparative table for 1889 and 1890, but the following statement of the business of the canal for the fiscal year ending June 30, 1890, will show that the steady increase of business marking the preceding years would surely attend the report for the completed season of 1890, while the statement immediately following it (Table P) will show by totals the uninterrupted growth of the canal's commercial importance for the 4 calendar years 1887–1890, inclusive:

TABLE O.—STATEMENT OF THE BUSINESS OF THE ST. MARYS FALLS CANAL DURING THE FISCAL YEAR ENDED JUNE 30, 1890.

NUMBER AND CLASS OF VESSELS PASSED.

Side-wheel steamers	76
Propellers	6, 806
Sailing vessels	2, 834
Rafts and unregistered craft	392
Total passages	10, 108

FREIGHT AND PASSENGER TRAFFIC.

Coal (net tons)	1, 894, 483
Copper (net tons)	36, 086
Flour (barrels)	2, 592, 736
Wheat (bushels)	19, 459, 736
Other grain (bushels)	2, 732, 698
Iron ore (net tons)	4, 404, 935
Pig and manufactured iron (net tons)	72, 163
Salt (barrels)	5, 905
Lumber (feet, board measure)	308, 032, 000
Building stone (net tons)	40, 829
Wool (net tons)	2, 597
Hides (net tons)	455
Miscellaneous and unclassified freight (net tons)	344, 425
Number of passengers	24, 125
Total registered tonnage (net tons)	7, 899, 604
Total freight tonnage (net tons)	8, 288, 580
Total registered tonnage since opening the canal in 1855 (net tons)	56, 539, 876

TABLE P.—STATEMENT SHOWING THE COMPARATIVE TOTALS OF THE ST. MARYS FALLS CANAL FOR THE YEARS 1887, 1888, 1889, AND 1890.

YEARS.	TONNAGE PASSED THROUGH.		Valuation of cargoes.	Cost of water carriage.	Cost per ton-mile.	Value of the fleet.
	Registered vessel tonnage.	Net tons actual freight.				
1887	4, 897, 598	5, 494, 649	$79, 031, 757	$10, 075, 153	2.3 mills.	$19, 773, 950
1888	5, 130, 659	6, 411, 423	82, 156, 021	7, 883, 077	1.5 mills.	21, 895, 400
1889	7, 221, 935	7, 516, 022	83, 732, 528	8, 634, 246	1.5 mills.	26, 926, 200
1890	8, 454, 435	9, 041, 213	102, 214, 948	9, 472, 214	1.3 mills.	29, 635, 500

By comparing the freight tonnage given in Table O as passing through the St. Marys Falls canal with the total receipts and shipments by Lake Superior ports it will be noticed that the canal tonnage exceeds the figures given in Table 7, the canal tonnage being 8,288,580 tons, while the Lake Superior tonnage stands at only 7,925,930, a difference of 362,650 tons. This is due in part to the fact that the year covered by the canal report is made up of the last 6 months of the year 1889 and the first 6 months of the year 1890, while the year from which the lake report is made is composed of the 12 months ending December 31, 1889, and it will be remembered that the winter embraced within the fiscal year 1889–1890 was a remarkably open one, thus permitting a late fall and an early spring trade. The discrepancy referred to is also partly explained by the fact that the tables of receipts and shipments for Lake Superior do not include the traffic between Canadian ports, and consequently take no account of the lake commerce of the Canadian Pacific railway originating at Port Arthur and passing through the canal. Some idea of the extent of this commerce may be gained from the fact that of the wheat passing through the canal during the lake navigation season of 1889 not less than 2,603,539 bushels are known to have been shipped from Port Arthur, while it is believed that the total shipments from that port may have been as high as 3,000,000 bushels, or 90,000 tons.

The statement for the fiscal year of 1889–1890 is particularly interesting because it rounds up the period of 35 years, which date back to the opening of the canal in 1855. The statistics of freight movement have not been kept with sufficient exactness for that number of years to give reliable details, but the records show that for the 35 years of its existence ending June 30, 1890, there had passed through the canal no less than 56,539,876 tons of freight. It is no less interesting to find that of this aggregate 35,588,389 tons, or about five-eighths of the whole, had passed since the opening of the new lock, September 1, 1881. The statement for the fiscal year 1889–1890 also includes the interesting but unspecified fact that during the last month of the fiscal year (June, 1890) the amount of freight which passed through the canal was 1,413,001 tons, the largest monthly amount on record, and that on one day in the same year, May 26, 1890, there passed through 74,686 tons of freight, this being the largest daily amount ever recorded. From 7:10 a. m., May 25, to 5:58 a. m., May 27, 1890, a period of 46 hours and 48 minutes, the lock was constantly in motion. These figures show that the limit of the present canal's capacity is being rapidly approached. In fact, it was seen as long ago as 1886 that the ultimate capacity of the canal would be reached in a very few years, and a still further enlargement was then proposed, which is now in progress. This will consist of a lock 800 feet long by 100 feet wide, with a depth of 21 feet on the sills, a lift of 18 feet (the full descent of St. Marys Falls), and the deepening of the canal to 20 feet. The new lock is to be placed upon the site of the two old ones, which lie between the present lock and the river, and will be used in connection with that now in operation. The cost of the enlargement is estimated at $4,738,865; the time for its execution was set for 5 years, and when finished it will be the largest single lock in the world. If on the completion of this enlargement the traffic of the canal takes such an upward bound as it did after the second enlargement, and there is no reason to doubt that it will, it seems certain that its traffic returns will still more distinctly lead those of the Suez canal than they do now.

OPERATIONS AND EARNINGS.—Among the various facts and figures which have been gathered at the canal as the "statistical key" to so large a portion of the lake traffic, none are more interesting than those of the earnings and operations of the craft passing the canal. In order to determine the total amount paid for the lake transportation of the freight carried through the canal during the season of 1889, a calculation of the freight rates between Lake Superior and the lower lake ports was made from the results of a diligent collection of data by the United States Army engineers in charge, and this adopted mean rate was applied to the amounts of freight passing the canal with the result seen in the following table, which shows the total cost of carrying the freight; or, to put it in another way, it shows the gross earnings of the various vessels made by the transportation of the indicated freight:

TABLE Q.—STATEMENT SHOWING THE FREIGHT RATE PER UNIT OF THE SEVERAL COMMODITIES CARRIED THROUGH THE ST. MARYS FALLS CANAL DURING THE SEASON OF 1889, TOGETHER WITH THE TOTAL AMOUNTS PAID FOR THE MOVEMENTS OF THE TOTAL COMMODITIES.

ARTICLES.	Unit.	Quantity.	Freight rate per unit.	Amount paid for freighting.
Total				$8, 634, 246. 63
Coal	Ton	1, 629, 197	$0. 47	765, 722. 59
Flour	Barrel	2, 228, 707	0. 18	401, 167. 26
Wheat	Bushel	16, 231, 854	0. 04	649, 274. 16
Other grain	Bushel	2, 133, 245	0. 03¼	69, 330. 46
Manufactured iron	Ton	31, 545	2. 10	66, 244. 50
Pig iron	Ton	26, 016	1. 45	37, 723. 20
Salt	Barrel	168, 250	0. 18	30, 285. 00
Copper	Ton	33, 456	2. 25	75, 276. 00
Iron ore	Ton	4, 095, 855	1. 14	4, 669, 274. 70
Lumber	M feet, B. M.	315, 554	2. 70	851, 995. 80
Silver ore and bullion	Ton	5, 947	1. 90	11, 299. 30
Building stone	Ton	33, 538	2. 07	69, 423. 66
General merchandise	Ton	312, 410	3. 00	937, 230. 00

The nature of the data from which the preceding table was formed was such that it included cost of loading and unloading.

Put into a condensed form the results obtained were as follows:

Total mile-tons	5, 940, 646, 352
Total freight paid	$8, 634, 246. 63
Cost per ton-mile .... mills	1. 5
Average distance freight was carried .... miles	790. 4

CANADIAN AND AMERICAN TONNAGE.—It has been said that the returns of tonnage made for the canal embrace both American and Canadian craft, and in the following statement a segregation of these is made, it being understood that the number of vessels given represents the actual number of craft which passed the canal during the year 1889, counted only as a fleet, and not as a repetitive aggregate:

TABLE R.—STATEMENT SHOWING THE NUMBER, TONNAGE, AND VALUE, AND PASSENGER AND FREIGHT TRAFFIC OF AMERICAN AND CANADIAN CRAFT PASSING THROUGH THE ST. MARYS FALLS CANAL IN THE SEASON OF 1889.

CRAFT.	Number.	Vessel tonnage.	Freight tonnage.	Number of passengers.	Valuation of vessels.
Total	581	394, 727	7, 516, 022	25, 712	$26, 989, 389
American vessels	521	371, 264	7, 254, 309	13, 740	25, 391, 789
Steamers (registered)	308	250, 959	4, 964, 724	13, 740	20, 947, 500
Sail vessels (registered)	208	118, 595	2, 253, 900	....	4, 381, 100
Sail vessels (unregistered)	5	a1, 710	a35, 685	....	a63, 189
Canadian vessels	60	23, 463	261, 713	11, 972	1, 597, 600
Steamers (registered)	37	15, 422	211, 075	11, 972	1, 385, 000
Sail vessels (registered)	23	8, 041	50, 638	....	212, 600

a Estimated.

The following facts regarding this canal may be stated in conclusion:

The comparatively small average distance which freight was carried in 1889 is because in that year there was a falling off in the transportation of wheat, already referred to, and an increase in that of ore, which is a shorter distance freight.

The greatest number of miles run by any one steamer during 1889 was 33,344, by the propeller Athabaska.

The greatest amount of freight carried and the greatest number of mile-tons to the credit of any one vessel during the season was by the freight propeller Northern Wave, which amounted to 59,001 net tons of freight and 58,311,447 mile-tons.

The largest single cargo carried by a steamer was 2,839 net tons, by the freight propeller Pontiac.

The largest single cargo carried by any vessel was by the lumber barge Wahnapatae, and consisted of 2,030,000 feet, board measure, green lumber; estimated at 4,060 tons.

DETROIT RIVER AND CANAL.

Just as the St. Marys Falls canal stands as the statistical key to the commerce entering and leaving Lake Superior, so the Detroit river stands between that of Lake Erie and the upper lakes. In the case of the St. Marys Falls canal a very large portion of the traffic was that which owes its origin to Lake Superior and the northwest territory, while in the case of Detroit river all the lakes can be said to be brought under contribution. A description of the improvements which have been made by the United States Army Corps of Engineers in and about Detroit river will be found in that portion of the text which may be considered as an annotation on the table of congressional appropriations. As to the commerce of American craft which passes through Detroit river, the round figures for the navigation season of 1889 are 90,000 tons of registered tonnage per day, or nearly 20,000,000 tons per year. The exact figures for the 234 days of navigation, which made up that season, are set down in the following summary, it being understood that the figures of number and tonnage are the aggregates of every day's record:

TABLE S.—STATEMENT SHOWING THE NUMBER AND TONNAGE OF THE VESSELS PASSING THROUGH DETROIT RIVER DURING THE SEASON OF 1889, WITH A SEGREGATION BY NATIONALITIES.

NATIONALITIES.	Number.	Tonnage.
Total	59, 737	36, 203, 606
American	32, 415	19, 646, 000
Canadian	27, 322	16, 557, 606

The figures of comparison between the Canadian traffic of the seasons of 1888 and 1889 are not at hand, but from the returns made of the commerce in American bottoms it is found that the increase in the number of vessels passing Detroit river in 1889 over 1888 was 1,011, while the increase in the tonnage was 546,940 tons.

The freight movement through the river for the year in American craft is given by principal commodities in the following table, and it is an interesting point to note how close is the total of freight traffic to that of the total of vessel tonnage, namely, 19,717,860 tons of freight to 19,646,000 tons of tonnage, which is the aggregate of the registered tonnage of the 32,415 American vessels which passed and repassed through the river in the process of carrying the freight in question:

TABLE T.—STATEMENT SHOWING THE ESTIMATED WEIGHT IN TONS OF THE FREIGHT PASSING THROUGH DETROIT RIVER IN AMERICAN VESSELS FOR THE SEASON OF 1889.

Barley	38, 294
Coal	5, 313, 419
Corn	1, 777, 750
Flour	655, 395
Iron ore	6, 610, 293
Lumber	2, 545, 792
Laths	23, 699
Oats	262, 896
Pig iron	94, 337
Salt	47, 737
Shingles	27, 668
Wheat	824, 451
Other grain	105, 412
Miscellaneous	1, 390, 717
Total	19, 717, 860

THE WELLAND CANAL.

The third great canal to be mentioned when considering the facilities of intercommunication between the lakes, and which occupies a position in their statistical economy almost equal in importance to that of the St. Marys Falls canal and Detroit river, is the Welland canal, connecting Lake Erie and Lake Ontario. The present Welland canal is so different in many of its features to the old Welland canal that it is known as and practically is a new canal. It starts from Port Colborne, on Lake Erie, at the head of Gravely bay, and reaches a summit level near Allanburg, from which point to Port Dalhousie, on Lake Ontario, a distance of 12 miles, there are 25 lift locks and regulating weirs, piers, and abutments for 12 road and 2 railroad bridges, 6 culverts to carry water courses under the canal and 1 for a public road, and a tunnel for the Great Western railroad. The engineering difficulties were largely encountered in this northern division, although in the southern division, which embraces the 15 miles between Port Colborne and Allanburg, the canal is crossed by 6 road and 3 railroad bridges, including an aqueduct of large dimensions through the Chippewa river, a lock at Welland, and another with 4 sets of gates at Port Colborne. The money expended on the undertaking up to 1889 amounted to $23,787,950, since which time the amount has been raised to nearly $25,000,000. Close statistics can not be given of the traffic conducted through the Welland canal, the work being under the control of the Canadian government, but it is stated by Mr. W. A. Livingstone, of Detroit, in his pamphlet entitled "The Great Lakes Problem", that the total traffic of actual freight in 1890 through the Welland canal was 1,016,165 net tons; that the quantity passing eastward through the canal from United States ports to United States ports had increased from 96,226 tons in 1881 to 318,259 tons in 1890, and that the increase in this movement in 1890 over that of 1880 was 20,906 tons.

The whaleback steamers of the American Steel Barge Company are the largest vessels that have passed through the Welland canal, and they are 265 feet long, 38 feet beam, and have an average draft of 15 feet when loaded.

CONGRESSIONAL APPROPRIATIONS.

The earliest appropriation made by the government for the improvement of the harbors of the Great Lakes and river St. Lawrence was in 1823, when an appropriation was made for the survey of Erie harbor of Pennsylvania. Since that time nearly 150 localities, scattered over the Great Lakes and St. Lawrence and Niagara rivers, have been improved under congressional aid. The sums appropriated up to the close of 1890 amounted to $40,912,975, of which amount $23,700,565 was appropriated up to and including 1879, $12,999,165 was included in the decade marked by 1880-1889, inclusive, the remaining $4,213,245 having been appropriated by the act of Congress of September, 1890.

For the improvement of the various harbors and shipping points on Lake Superior there has been appropriated $9,233,300, the earliest appropriation going back to 1858, between which time and the close of 1879 there was appropriated $3,467,555, the sum of $3,738,500 having been appropriated from 1880 to 1889, and $2,027,245 by the act of Congress of September, 1890.

For Lakes Huron and St. Clair the appropriations have been $3,691,700, of which amount $1,934,310 was appropriated from 1852 to the close of 1879, $1,511,890 for the decade ending with 1889, and $245,500 by the act of Congress of September, 1890.

The appropriations for the improvement of Lake Michigan ports have been $11,251,243, the earliest appropriation being in 1826, for La Plaisance bay, when that harbor was improved by the expenditure of $19,803. The act of Congress of September, 1890, allotted $893,000 for the improvement of all the lake points; but the largest appropriations were made up to and including 1879, by which time $6,440,843 of the public moneys had been granted for the lake improvements, while for the period 1880–1889 the appropriations amounted to $3,917,400.

The appropriations for Lake Erie began the earliest of all the lakes, the first, as was noted in the previous paragraph, being made in 1823. The total amount appropriated for this lake up to the close of 1890 was $8,879,336, of which amount by far the largest portion, $5,362,336, was appropriated by the close of 1879, the appropriations for the years 1880–1889 being $2,712,500, and the sum granted by the act of Congress of September, 1890, being $804,500.

Lake Ontario's appropriations have amounted to $3,592,730, of which amount $2,581,855 was appropriated up to the close of 1879, $895,875 during the 10 years ending 1889, and $115,000 by the 1890 act of Congress.

On the improvements of St. Lawrence river there has been expended $251,506 and on those of Niagara river the appropriations have amounted to $233,598.

Between the sum of these amounts, however, and the $40,912,975 given as the total appropriation for the Great Lakes there is a difference of $3,779,562, that sum being made up by general appropriations for which there was no indication of special locality, but which were made for such comprehensive purposes as general survey, chart making, and the building of survey steamers and dredging machines.

In the assignment of appropriations made in the preceding paragraphs the lakes have been made the recognized divisions, but when charged to the states which lie around the lakes the amounts stand as set down in the following statement:

TABLE U.—STATEMENT SHOWING THE AMOUNTS APPROPRIATED BY CONGRESS FOR THE SURVEY, IMPROVEMENT, AND MAINTENANCE OF THE HARBORS OF THE GREAT LAKES AND ST. LAWRENCE RIVER, GIVEN BY PERIODS AND ALLOTTED TO THE RESPECTIVE STATES IN WHICH THE HARBORS LIE.

STATES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress September, 1890.	Total appropriations up to date.
Total	....	$23,700,565	$12,999,165	$4,213,245	$40,912,975
Minnesota	1871	271,050	413,750	147,350	832,150
Wisconsin	1836	2,408,881	1,483,000	472,395	4,364,276
Michigan	1826	7,266,398	5,790,390	2,298,500	15,355,288
Illinois	1833	1,426,005	1,120,400	205,000	2,751,405
Indiana	1836	679,889	381,250	57,500	1,118,639
Ohio	1825	2,580,987	1,658,500	429,500	4,668,987
Pennsylvania	1823	616,367	235,500	40,000	891,867
New York	1826	4,729,426	1,858,375	563,000	7,150,801
General appropriations, all states	1836	3,721,562	58,000	....	3,779,562

For convenience of reference the following list of harbors and trading points which have been improved by government aid has been prepared, the localities being grouped under the titles of the lakes on which they are found, with the state of each locality added:

IMPROVED HARBORS AND RIVERS.

LAKE SUPERIOR.

Agate bay, Minnesota.
Ashland harbor, Wisconsin.
Duluth harbor, Minnesota.
Eagle harbor, Michigan.
Grand Marais harbor, Minnesota.
Grand Marais harbor of refuge, Michigan.
Marquette harbor, Michigan.
Ontonagon harbor, Michigan.
Portage Lake ship canal, Michigan.
St. Marys river and St. Marys Falls canal, Michigan.
Superior and St. Louis bays, Wisconsin.

LAKES HURON AND ST. CLAIR.

Alpena harbor (Thunder bay), Michigan.
Au Sable river and harbor, Michigan.
Belle river, Michigan.
Black river, Michigan.

LAKES HURON AND ST. CLAIR—continued.

Cheboygan harbor, Michigan.
Clinton river, Michigan.
Clinton harbor, Michigan.
Detroit river, Michigan.
Harbor of refuge at Sand beach, Michigan.
St. Clair river flats and canal, Michigan.
Saginaw river, Michigan.
Sebawaing harbor, Michigan.

LAKE MICHIGAN.

Ahnapee harbor, Wisconsin.
Black Lake harbor, Michigan.
Calumet harbor and river, Illinois.
Cedar river (Green bay), Michigan.
Charlevoix harbor, Michigan.
Chicago harbor, Illinois.
Fox river, mouth of, Wisconsin.
Frankfort harbor, Michigan.

LAKE MICHIGAN—continued.

Grand Haven harbor, Michigan.
Grand river, Michigan.
Green Bay harbor, Wisconsin.
Kenosha harbor, Wisconsin.
Kewanee harbor, Wisconsin.
Lake Winnebago, Wisconsin.
La Plaisance bay, Michigan.
Ludington harbor, Michigan.
Manistee harbor, Michigan.
Manistique harbor, Michigan.
Manitowoc harbor, Wisconsin.
Menominee harbor, Wisconsin.
Michigan city (outer harbor), Indiana.
Michigan city (inner harbor), Indiana.
Milwaukee bay, Wisconsin.
Milwaukee harbor, Wisconsin.
Muskegon harbor, Michigan.
New Buffalo harbor, Michigan.

IMPROVED HARBORS AND RIVERS—Continued.

LAKE MICHIGAN—continued.

Oconto harbor, Wisconsin.
Pensaukee harbor, Wisconsin.
Pentwater harbor, Michigan.
Petoskey harbor, Michigan.
Port Washington, Wisconsin.
Portage Lake harbor of refuge, Michigan.
Racine harbor, Wisconsin.
St. Josephs harbor, Michigan.
St. Josephs river (survey), Michigan.
Saugatuck harbor, Michigan.
Sheboygan harbor, Wisconsin.
South Haven harbor, Michigan.
Sturgeon bay, Wisconsin.
Two Rivers harbor, Wisconsin.
Waukegan harbor, Illinois.
White river harbor, Michigan.

LAKE ERIE.

Ashtabula harbor, Ohio.
Black river harbor, Ohio.
Buffalo harbor, New York.

LAKE ERIE—continued.

Cattaraugus creek, New York.
Cleveland harbor, Ohio.
Conneaut harbor, Ohio.
Cunningham creek, Ohio.
Dunkirk harbor, New York.
Erie harbor, Pennsylvania.
Grand river harbor (Fairport), Ohio.
Huron river and harbor, Ohio.
Monroe harbor, Michigan.
Port Clinton harbor, Ohio.
Portland harbor, New York.
Rocky river harbor, Ohio.
Rouge river, Michigan.
Sandusky city harbor, Ohio.
Sandusky river, Ohio.
Toledo harbor, Ohio.
Vermilion river, Ohio.

LAKE ONTARIO.

Black river (Sacketts harbor), New York.
Charlotte harbor, New York.

LAKE ONTARIO—continued.

Great Sodus bay, New York.
Little Sodus bay, New York.
Oak Orchard harbor, New York.
Olcott harbor, New York.
Oswego harbor, New York.
Port Ontario harbor, New York.
Pultneyville harbor, New York.
Sacketts harbor, New York.
Sandy creek, New York.
Wilson harbor, New York.

ST. LAWRENCE RIVER.

Grass river, New York.
Ogdensburg harbor, New York.
Sister islands, New York.
Waddington harbor, New York.

NIAGARA RIVER.

Black Rock harbor, New York.
Tonawanda harbor, New York.

The importance of the improvement of the shipping facilities of these waters is so undoubted that no excuse is needed for giving space to the subject, and in addition to this bare list of the localities that have been improved the following statement takes up this list and shows what has been done under the appropriations:

LAKE SUPERIOR.

Agate bay, Minnesota.—This is a small indentation in the north shore of the lake, and though it has ample depth of water it is not protected on the southwest or from the reverse swells of the more dangerous storms of the northeast. The little security it afforded, however, was sufficient to warrant the construction of extensive docks for the handling of ore and other merchandise. The commerce soon grew out of all proportion to the size of the harbor, and for its security it was found necessary to supplement the natural protection by artificial means. Two piers projecting from either shore have accordingly been proposed, and though only one has been partly built the tranquillity of the harbor has been greatly increased by it.

Ashland harbor, Wisconsin.—This harbor comprises a portion of Chequamagon bay. It was not thoroughly protected from the storm waves which rolled into its mouth, or from the waves generated by the bay itself, and a breakwater has been accordingly built of about 4,700 feet long, in order to give the requisite shelter. This length is hardly sufficient to afford protection to all the wharves of the city, and it is accordingly proposed to extend it 5,000 feet further.

Duluth harbor, Minnesota.—The proposed plan to improve this harbor, which lies at the head of Lake Superior, is to cut a canal through the narrow strip of land or sand bar known as Minnesota point, thus uniting the waters of the bay and Lake Superior, to be followed by the construction of a breakwater parallel to this bar. But little has been done, however, on these projects in consequence of a disputed ownership of the land.

Eagle harbor, Michigan.—This harbor was improved not so much to further commerce as to provide a harbor of refuge. The improvements have consisted of cutting a channel of good depth through a ledge which obstructed the entrance to the bay.

Grand Marais harbor, Minnesota.—On the north shore of Lake Superior there are very few localities where safe anchorage for vessels is to be found, and Grand Marais offers the only place of refuge for vessels during storms between Agate bay and Pigeon river. It is not yet a shipping port of any importance, though it is not distant from the rich deposits of iron ore of the Vermilion range. The improvements have consisted of dredging the harbor basin and the construction of a pier and breakwater.

Grand Marais harbor of refuge, Michigan.—This harbor is accessible only for vessels drawing less than 9 feet, but once within the bay there is ample depth to float the largest vessels. As a harbor of refuge it is of pressing necessity to the shipping navigating the lakes in this vicinity, as the many wrecks in the neighborhood bear witness. The project for the improvement of this harbor has been the creation of a safe entrance to the bay for vessels of the largest size, formed by establishing crib piers sheltering a channel of 300 feet in width.

Marquette harbor, Michigan.—The improvement of this harbor has consisted in the erection of a breakwater projecting from the shore into the bay a distance of 2,000 feet. The area of commerce is so rapidly increasing, however, that the extension of the breakwater has become a necessity.

ONTONAGON HARBOR, MICHIGAN.—This harbor is formed by the mouth of the river of the same name, and it has fairly deep water, but its mouth is obstructed by a bar. The project of improvement was to build out parallel piers into the lake on either side of the river's mouth with the expectation that the confined current of the river would scour out a good channel through the bar. The expectation, however, has not been fully realized.

PORTAGE LAKE SHIP CANAL, MICHIGAN.—The appropriation of 1886 was for the examination of the Portage Lake and Lake Superior ship canals, with a view to accept the offer of the company to transfer all their rights to the United States for $350,000. These canals being the water communication across Keweenaw point, Lake Superior, from Keweenaw bay to Lake Superior, in the state of Michigan. The appropriation of 1890 was for the purchase of these canals.

ST. MARYS RIVER AND ST. MARYS FALLS CANAL, MICHIGAN.—The improvement here consists of two parts: first, that of obtaining a 16-foot navigation as an approach to the canal, and second, the construction of the canal itself, about a mile in length, which overcomes by its lockage system a difference of level between lakes Superior and Huron of about 18 feet. So enormous has traffic grown over this route that the old locks have been replaced by a single one 515 feet long and 80 feet wide, which in its turn is to be replaced by a new one 800 feet long and 100 feet wide.

SUPERIOR AND ST. LOUIS BAYS, WISCONSIN.—The natural channel connecting these 2 bays with Lake Superior is at the southeastern extremity of Minnesota point, referred to in the paragraph concerning Duluth. Channels have been dredged through the bays to this outlet, which is protected by crib piers having an aggregate length of 5,650 feet.

LAKES HURON AND ST. CLAIR.

ALPENA HARBOR, THUNDER BAY, MICHIGAN.—The important and rapidly growing city of Alpena is situated at the mouth of Thunder Bay river, from which prior to the commencement of the government improvements there was a navigable channel into the bay of 12 feet depth and variable width. This has been improved to a channel of good navigable width and of 14 feet uniform depth.

AU SABLE RIVER AND HARBOR, MICHIGAN.—Before the beginning of improvements the mouth of Au Sable river was 150 feet wide, with a depth of 5 feet over the bar. The project for the improvement of the harbor has been to obtain a channel between the lake and the harbor of not less than 10 feet in depth and 100 feet in width.

BELLE RIVER, MICHIGAN.—The projects of improvement here have been to construct an ice harbor of refuge and the formation of a channel from the mouth of the river to the lake.

BLACK RIVER, MICHIGAN empties into St. Clair river at Port Huron, Michigan. At and below its mouth, extending beyond the middle of St. Clair river, there is a bar, and the improvement has been the dredging of a channel through this obstruction.

CHEBOYGAN HARBOR, MICHIGAN.—Prior to undertaking any improvement at this harbor only 7 feet of water could be carried across the bar at the mouth of the river, and the project of government improvement has been the formation of a channel 200 feet wide and 14 feet deep.

CLINTON RIVER AND HARBOR, MICHIGAN.—In 1870 the channel over the bar at the entrance to the river afforded a depth of only 3.5 feet, while the depth of the river for some distance above was 10 feet, and the government improvement has consisted of securing a navigable depth of 8 feet through the bar.

DETROIT RIVER, MICHIGAN.—Originally the channel at the entrance to Detroit river could not be depended upon for more than 18 feet of water, the ordinary depth being much affected by the direction of the wind. The government project of improvement has consisted of securing and maintaining a channel 400 feet wide and 20 feet deep.

HARBOR OF REFUGE AT SAND BEACH, MICHIGAN.—Before 1876, vessels when caught in heavy weather near the dangerous Pointe Aux Barques (the southern headland of the mouth of Saginaw bay) were compelled to run a distance of 60 miles and find a refuge in St. Clair river, whence, after the subsidence of the storm, those upward bound had to work their way back again. The project of improvement is for the construction of a harbor of refuge at Sand beach.

ST. CLAIR RIVER FLATS AND CANAL, MICHIGAN.—Before the construction of the canal the St. Clair river emptied into Lake St. Clair through 7 principal mouths or passes, that ordinarily used by vessels being known as the south channel, having a minimum depth of a little less than 11 feet. The St. Clair Flats canal was projected in 1866, with a view to obtaining a straight channel 13 feet deep and 330 feet wide across the flats east of the mouth of this south channel, the work being finished in 1871. The canal is bounded on each side by a dike 7,221 feet long, or an aggregate of 14,442 feet. In 1873 the channel was deepened to 16 feet by dredging for a width of 200 feet, the width being thus limited by the fact that the slope of the dikes did not admit of dredging to 16 feet for the full width of 300 feet. The present project of improvement is to protect the face of the dikes in such a way that the full width of the channel may be dredged to a uniform depth of 20 feet.

SAGINAW RIVER, MICHIGAN.—Before any improvements were made the entrance to this river was obstructed by a bar about a mile from the shore; and thence to the head of the river, a distance of about 16 miles, the channel was obstructed by a number of other bars. The project of improvement was to dredge out a channel which would have a uniform depth of 10 feet.

SEBEWAING HARBOR, MICHIGAN lies at the mouth of the river of the same name, and the improvements have consisted of the formation and protection of a navigable channel from it into Saginaw bay.

LAKE MICHIGAN.

AHNAPEE HARBOR, WISCONSIN, is a small artificial harbor constructed for local purposes in the mouth of Ahnapee river, and has been formed by the usual process of dredging out a channel and the erection of protecting piers.

BLACK LAKE HARBOR, MICHIGAN, was to have been formed by the completion of a protected channel connecting it with Lake Michigan, but no adequate appropriations for the purpose have been secured. It has a length of 5 miles, an average width of about half a mile, and a navigable depth from end to end of only 4 fathoms. The town of Holland, a thriving place with a population of 3,945, is built at the head of the lake.

CALUMET HARBOR AND RIVER, ILLINOIS.—The object of this improvement was to provide a deep entrance to Calumet river and the port of South Chicago, in order both to increase the commercial facilities of that place and to give relief to Chicago itself.

CEDAR RIVER (GREEN BAY), MICHIGAN.—The harbor of Cedar river is located in the mouth of the river itself, and the improvement of the locality has been effected by dredging out and protecting a navigable channel from the harbor into Green bay.

CHARLEVOIX HARBOR, MICHIGAN, lying between Grand and Little Traverse bays, is formed by Round lake, a picturesque body of water about half a mile long and a quarter of a mile wide, upon the banks of which the town is built. Adjoining it on the land side is Pine lake, and the official project of improvement provides for a navigable channel of good dimensions from Lake Michigan into Round lake and thence into Pine lake.

CHICAGO HARBOR, ILLINOIS.—The improvements of Chicago harbor have consisted, first, of the formation of the outer harbor or basin by including a portion of Lake Michigan just south of and adjoining the entrance to Chicago river, for the purpose of increasing the harbor facilities of the port and to give relief to the overcrowded river, and, second, the construction of an exterior breakwater to shelter the entrance to Chicago river and the outer harbor from northerly storms, and to form a sheltered area or harbor of refuge at the southern end of Lake Michigan. A subsidiary project has been the protection of the entrance to Chicago river by piers.

FOX RIVER (MOUTH OF), WISCONSIN.—This river empties into Green bay. The improvements form a part of the extensive project mentioned under the head of Green Bay harbor, Wisconsin.

FRANKFORT HARBOR, MICHIGAN, is really the little Lake Aux Becs Scies, lying south of Point Betsey, one of the important headlands on the east coast. Separating the little lake from the big one lies a sand spit, and the project of improvement has been to cut a channel through this obstruction.

GRAND HAVEN HARBOR, MICHIGAN, is both a harbor of local importance and of special status as a harbor of refuge for general commerce. The improvements have been the confinement of the volume of water flowing out of Grand river, thus providing an entrance of good width and depth.

GRAND RIVER, MICHIGAN.—The projected work here is that of improving the navigation of the river from Grand Rapids to its mouth at Grand Haven.

GREEN BAY HARBOR, WISCONSIN.—The improvements of Green bay, which lies at the mouth of Fox river, form a part of the original and much more extensive project which was to secure a cheap route of transportation from Mississippi river to the Great Lakes, and also to the Atlantic seaboard via Wisconsin river, Lake Winnebago, Neenah river, Fox river, and Green bay. All the items of appropriation which are set down for these various localities may be considered as having been expended in the survey for or the furtherance of this comprehensive project.

KENOSHA HARBOR, WISCONSIN, is situated at the mouth of Pike creek, and the project of improvement is the usual one of the formation and protection of a navigable channel between the harbor and Lake Michigan.

KEWANEE HARBOR, WISCONSIN, is situated at the mouth of Kewanee river, the improvements being of that character which have been already once or twice described.

LAKE WINNEBAGO, WISCONSIN.—The improvements for this lake form a part of the extensive project mentioned under the head of Green Bay harbor, Wisconsin.

LA PLAISANCE BAY, MICHIGAN.—The nineteen thousand and odd dollars set down as the appropriations for the improvement of this place were expended from 1826 to 1836, and were used to form and protect a safe entrance to the bay. The bay is of no present importance.

LUDINGTON HARBOR, MICHIGAN.—Ludington is built about the lower end of Pere Marquette lake, which is 9 or 10 miles long and half a mile in average width. A harbor of refuge has been established in the construction of protecting piers from Lake Michigan to deep water in the inner lake.

MANISTEE HARBOR, MICHIGAN, is on Manistee lake, and the improvement has consisted of enlarging and protecting the channel between it and Lake Michigan.

MANISTIQUE HARBOR, MICHIGAN.—The improvement here has been of that kind so often described, to secure and maintain a navigable channel from Lake Michigan to the mouth of Manistique river where the harbor of Manistique is situated.

MANITOWOC HARBOR, WISCONSIN.—A similar project of improvement.

MENOMINEE HARBOR, WISCONSIN.—A similar project of improvement.

MICHIGAN CITY, INDIANA.—The appropriation acts make a distinction between the outer harbor and the inner harbor, separate provision being made for each. The inner harbor, where all the shipping business is done, and which in fact furnishes all the harbor facilities that exist, consists of Trail creek, which winds through the town and which has been dredged landward for a distance of nearly 1.5 miles from the mouth, where piers on each side 100 feet apart projecting into the lake protect the entrance. The outer harbor, so called, consists of several works constructed at different dates and designed for the protection of the general lake commerce, in view of the great development of the shipping industries and the exposed location of the harbor at the head of the lake.

MILWAUKEE BAY AND HARBOR, WISCONSIN.—So far as the bay is concerned the project of improvement has been that of securing anchorage for vessels engaged in the general commerce of the lakes by inclosing its northern section within a breakwater, while the improvement of Milwaukee harbor has been that of gaining and maintaining a navigable channel from Lake Michigan into Milwaukee river, which is really the inner harbor of Milwaukee.

MUSKEGON HARBOR, MICHIGAN.—Muskegon is the principal coast city on the east shore of the lake and the leading one in population and products. It is situated on Lake Muskegon, a body of water about 5 miles long and 1.5 miles in width, into which Muskegon river flows and thence to Lake Michigan through a natural channel maintained by an overflow. The official project had in view the extension of piers and revetments to such a distance into Lake Michigan as to secure a 15-foot navigation, and this result has approximately been attained, although additional development is needed to the works to counteract the formation of the bar outside the entrance. Muskegon is claimed by local authorities to be the largest lumber manufacturing town in the United States, its annual products being 600,000,000 feet of lumber, 500,000,000 shingles, and 175,000,000 lath.

NEW BUFFALO HARBOR, MICHIGAN.—The improvements of this harbor, which lies just above the Indiana state line, were all made between 1852 and 1872, and were of the usual character belonging to lake harbors.

OCONTO HARBOR, WISCONSIN, lies at the mouth of Oconto river, which empties into Green bay, and the project of improvement has been to secure a navigable channel from Green bay up Oconto river to the city.

PENSAUKEE HARBOR, WISCONSIN.—The conditions here are so similar to those of Oconto that they need not be detailed.

PENTWATER HARBOR, MICHIGAN.—The town of Pentwater is built at the lower end of Pentwater lake, which is about 2.5 miles long and half a mile wide. The official project connects the inner lake with Lake Michigan by a 12-foot channel protected by piers and revetments 150 feet apart. As in nearly all similar cases, the full depth has not been reliably secured or maintained, the wave action in Lake Michigan tending to the deposit of sand between the piers, while the piers themselves, from their comparatively open character, permit the wash and drift of sand through them from the beaches.

PETOSKEY HARBOR, MICHIGAN.—Petoskey is a small village of 2,872 people, occupying a picturesque site on the bluffs overlooking Little Traverse bay, and near its head. The bluffs descend almost vertically to the narrow gravel beach of the bay, which here is fully exposed to the winds from the north and northeast. The present and prospective business of the place is small, and it is chiefly noted as a popular summer resort and for its fine specimens of agate, while, being at the terminus of an important railroad, it is a point of departure to numerous like resorts in the neighborhood of the straits of Mackinaw. During high winds from the north and west these vessels find it difficult to make a landing at the one small dock of Petoskey, and at times find it impossible to do so, when they seek shelter in the commodious natural harbor 3 miles across the bay. This harbor, known as Harbor Springs, is one of the harbors of refuge on the lakes, and therefore the project of building a harbor of refuge at Petoskey has been adversely reported on and the construction of a breakwater only has been recommended.

PORT WASHINGTON, WISCONSIN, consists of two small interior and connected basins, and the object of the improvement has been to secure a navigable channel entrance from Lake Michigan by parallel piers extending from the shore line to 10 feet of water in the lake.

PORTAGE LAKE HARBOR OF REFUGE, MICHIGAN, is a considerable body of water, 3.5 miles long by 1 mile in width, situated nearly midway of the 55 miles of concave coast between Point Betsey and Grande Pointe Au Sable. There is no harbor south of Frankfort in the length of this stretch except the Manistee entrance, which has neither the width nor depth adequate to make it available as a harbor of refuge for general commerce, and many disasters to shipping have occurred. For this reason the official project for Portage lake, under which appropriations have been made since 1879, provided for the construction of a passage through the narrow beach separating Portage lake from Lake Michigan, with a width of 400 feet and a depth of 18 feet, dimensions which are the same as at Grand Haven and which would render the harbor suitable for all lake vessels needing shelter.

RACINE HARBOR, WISCONSIN.—Both the city and harbor of Racine are situated at the mouth of Root river, and the object of the improvements has been the construction and maintenance of a channel 18 feet deep and 160 feet wide from the harbor into the lake.

ST. JOSEPH HARBOR AND RIVER, MICHIGAN.—Where St. Joseph and Pawpaw rivers unite the water area extends into a basin about half a mile in length by one-sixth of a mile in width, which is designated St. Joseph harbor, and as such has been under improvement by the United States since 1836, partly for the benefit of local commerce, but more especially as a harbor of refuge for general commerce. The official project has provided for an entrance with a depth of 16 feet, protected by piers on each side, with an average width of 270 feet.

SAUGATUCK HARBOR, MICHIGAN, is formed at the mouth of Kalamazoo river, and the improvements have been of the usual nature described in speaking of those other localities where the necessity has existed for maintaining a navigable channel.

SHEBOYGAN HARBOR, WISCONSIN, is formed at the mouth of Sheboygan river, and the improvements are those of forming and maintaining a navigable channel of good dimensions from the lake to the harbor.

SOUTH HAVEN HARBOR, MICHIGAN.—The official project for this harbor, which is the mouth of Black river where the town of South Haven is situated, calls for a 12-foot navigable channel with an extreme width of 108 feet.

STURGEON BAY, WISCONSIN.—The object of the government improvements here has been to form a harbor of refuge inclosing the Lake Michigan entrance to Sturgeon Bay and Lake Michigan ship canal, and also to afford a safe entrance to the canal in rough weather.

TWO RIVERS HARBOR, WISCONSIN, is situated at the mouth of the Twin rivers, and the improvements have been those of the usual kind described as being necessary under similar conditions.

WAUKEGAN HARBOR, ILLINOIS.—The character of the improvement of this harbor is somewhat different from that of other points on the Great Lakes. Most of the improvements have consisted in deepening the mouths of streams emptying into the lake, but at Waukegan there is only a creek emptying into the lake, and it is of no importance for harbor purposes. The project of improvement here, therefore, has been to construct an exterior basin of sufficient capacity to meet the requirements of local trade by inclosing a portion of Lake Michigan within sheltering piers.

WHITE RIVER HARBOR, MICHIGAN.—White lake is about 4.5 miles long by three-fourths of a mile wide, and the towns of Whitehall and Montague are built on its upper or eastern end, where White river enters the lake and discharges through it into Lake Michigan. The official project connects the 2 lakes by a 12-foot channel between piers and revetments 200 feet apart.

LAKE ERIE.

ASHTABULA HARBOR, OHIO.—The original project for the improvement of this harbor was adopted in 1826, at which time there was a depth of only 2 feet of water on the bar. As the result of this improvement there is now a protected channel of 17 feet between the harbor and the lake.

BLACK RIVER HARBOR, OHIO.—Black river, Ohio, is formed by two branches nearly equal in size which unite about 8 miles from the town of Lorain, where the river empties into Lake Erie. The project of improvement, commenced in 1828 and maintained from time to time as the demands of commerce called for, provides for a protected channel between the harbor and the lake 16 feet in depth.

BUFFALO HARBOR, NEW YORK.—Up to 1868 Buffalo harbor and Buffalo creek may be considered to have been synonymous terms. The earliest record of which there is any trace as to the condition of this harbor was in 1818, at which time the mouth of the creek was most of the year closed by a gravel bar which was cut out by freshets and then closed up again. From that time a number of improvements have been carried out until to-day the present works consist of (1) a pier on the north side of Buffalo creek, known as the North pier; (2) a pier on the south side of the creek, known as the South or Lighthouse pier; (3) a detached breakwater, to be when finished 7,800 feet long, with a shore arm, to be when finished 4,100 feet long; (4) a pile pier, built for a sand catch and eventually to form a part of the shore arm of the breakwater; (5) a sea wall of masonry to protect the shore from the waves of the lake.

CATTARAUGUS CREEK, NEW YORK.—The improvements here, all of which were effected between the years 1826 and 1836, were simply for the improvement of the harbor, which is really the mouth of the creek.

CLEVELAND HARBOR, OHIO, is situated at the mouth of Cuyahoga river. The improvements, which are the outcome of many projects, have resulted in a protected channel of good depth, 200 feet wide, running out to the depth of 16 feet in the lake, and the formation of a harbor of refuge.

CONNEAUT HARBOR, OHIO, which lies at the mouth of the creek of the same name, has been improved by the removal of a bar which obstructed navigation and by the formation of a protected channel.

CUNNINGHAM CREEK, OHIO.—The work of improvement at this place has been of the same nature as that described for Conneaut harbor.

DUNKIRK HARBOR, NEW YORK.—The improvement of this harbor was commenced in 1827, and the original project was much the same as that of the existing improvements, which comprise the formation of an artificial harbor in front of the city.

ERIE HARBOR, PENNSYLVANIA.—The object of the improvement here has been to protect the harbor from severe winds from the east and northeast, and to obtain and maintain a channel between deep water in the harbor and the open lake 16 feet deep at low water and of good navigable width.

GRAND RIVER HARBOR (FAIRPORT), OHIO, which is officially known as Fairport, has been improved by the construction and maintenance of a protected channel 200 feet wide through a sand bar. Fairport is now the third harbor on the list of Lake Erie harbors in the amount of ore received, and owing to the increased size of vessels at present in use on the lake in this traffic an increased depth to 18 feet is stated to be necessary.

HURON RIVER AND HARBOR, OHIO.—The improvements here are precisely of the same character as those that have been effected at all other localities where the entrance to the harbor has been obstructed by a bar.

MONROE HARBOR, MICHIGAN, is situated at the extreme western end of Lake Erie, about 1.5 miles west of the mouth of Raisin river, and about 3.5 miles from the town of Monroe. The improvements were commenced here in 1835, when Raisin river was considered an important stream and Monroe a place of increasing commerce. The work done has consisted in straightening the river, making direct connection with Lake Erie through a sand peninsula by a channel 4,000 feet long and 100 feet wide.

PORT CLINTON, OHIO, is situated at the mouth of Portage river, and the improvements have consisted of the same work of making and maintaining a channel which has been so frequently described.

PORTLAND HARBOR, NEW YORK.—The improvements here were all carried out from 1836 to 1844.

ROCKY RIVER HARBOR, OHIO.—The improvements of Rocky River harbor have consisted of the formation and protection of a navigable channel from the mouth of the harbor to deep water in the lake.

ROUGE RIVER, MICHIGAN, is somewhat remarkable for the depth of the water in its lower reaches, a channel of 11 feet over the bar at its mouth being in existence, and the improvements have consisted in dredging out the stream up to its junction with Detroit river.

SANDUSKY CITY HARBOR AND SANDUSKY RIVER, OHIO.—Sandusky bay empties into or rather opens on Lake Erie about 40 miles from its western extremity. It has a natural harbor containing an area of about 22.5 miles, a depth of from 8 to 12 feet, and is protected on the north and northwest by a long, narrow peninsula, and on the northeast by Cedar point. The project of improvement has included the construction of a channel 200 feet wide and 15 feet deep through the outer bar and up to the city front. The Sandusky river empties into Sandusky bay about 14.5 miles from Cedar point, and the improvement of the river has been the dredging out of a 9-foot channel from the city of Fremont, the head of navigation, 17 miles from the mouth of the river, to a 9-foot depth in the bay.

TOLEDO HARBOR, OHIO.—The city of Toledo is situated at the mouth of Maumee river, which empties into Maumee bay about 7 miles from the deep water of Lake Erie. The improvements here have consisted mainly of the construction and maintenance of a straight channel from the mouth of the river to deep water in Lake Erie.

VERMILION RIVER, OHIO.—Vermilion river, the mouth of which constitutes Vermilion harbor, empties into Lake Erie, about 20 miles to the east of Sandusky city, and the improvements have resulted in the construction of a channel of good depth between the harbor and lake.

LAKE ONTARIO.

BLACK RIVER (SACKETTS HARBOR), NEW YORK.—The improvements here may be said to be for the mouth of this river, which empties into Sacketts harbor.

CHARLOTTE HARBOR, NEW YORK.—The improvements here have resulted in securing a navigable channel at the mouth of Genessee river.

GREAT SODUS BAY, NEW YORK.—The improvements here have resulted in securing a navigable channel of 15 feet in depth from Lake Ontario to the bay.

LITTLE SODUS BAY, NEW YORK.—The plan of improvement here has been the same as that described at Great Sodus bay.

OAK ORCHARD HARBOR, NEW YORK.—A protected channel 200 feet wide and 12 feet deep has been secured as the result of the government improvements here.

OLCOTT HARBOR, NEW YORK.—The improvements here have resulted in obtaining a channel 11 feet deep between Lake Ontario and the deep water in Eighteen Mile creek, where Olcott harbor lies.

OSWEGO HARBOR, NEW YORK.—The object of the improvements here has been to provide a basin of sufficient size and depth for the needs of commerce at the mouth of Oswego river and to secure and maintain a navigable channel into said basin and river from the lake.

PORT ONTARIO HARBOR, NEW YORK.—The improvements at this harbor, which lies at the mouth of Salmon river, were of little importance, and were all effected between the years 1836 and 1844.

PULTNEYVILLE HARBOR, NEW YORK.—The improvements here differ somewhat from those so often described in that they had for their object the formation of a harbor by protecting breakwaters.

SACKETTS HARBOR, NEW YORK.—The improvements here may be said to embrace both those which have directly affected the harbor and those which have been applied to Black river, which empties into the harbor. The harbor improvements have consisted of dredging out a large area to a good depth and the checking of drifting material, while the improvements of the river have consisted of deepening and maintaining a navigable channel.

SANDY CREEK, NEW YORK.—The appropriations made for this place were for the survey of its mouth with a view to constructing a harbor at this place. The project, however, was not carried into effect.

WILSON HARBOR, NEW YORK, is situated at the mouth of Twelve Mile creek, and the object of the improvement has been to secure a 12-foot channel between it and Lake Ontario.

ST. LAWRENCE RIVER.

GRASS RIVER, NEW YORK.—The project of the improvement here contemplated the formation of a channel from St. Lawrence river to Massena village, a distance of 7 miles, with a minimum width of 40 feet and a least depth of about 4 feet.

OGDENSBURG HARBOR, NEW YORK.—When operations were commenced at this harbor in 1868 the channel afforded depths of 5 to 12 feet only, and now there are 3 channels from deep water in St. Lawrence river to the nearest docks or wharves, in which water from 15 to 16 feet deep is afforded, and a channel from 12 to 15 feet deep has been made along the city front.

SISTER ISLANDS, NEW YORK.—This appropriation was made by the act of 1890 for the improvement of the shoal between Sister islands and the Cross-over light.

WADDINGTON HARBOR, NEW YORK.—The appropriations for the improvement of Waddington harbor closed in 1881, by which time the project of opening a channel through a bar at the head of the river which forms Waddington harbor was completed.

NIAGARA RIVER.

BLACK ROCK HARBOR, NEW YORK.—The improvements of Black Rock, which lies at the outlet of Lake Erie, were conducted between the years 1829 and 1834, and consisted of the dredging out of a navigable channel of good dimensions.

TONAWANDA HARBOR, NEW YORK.—The improvement here has embraced the formation of a navigable channel from the entrance of Niagara river at Lake Erie to the north end of Tonawanda river, the channel to be 400 feet wide and 18 feet in depth.

INCREASE AND IMPROVEMENT.

From the figures given it will have been seen that the total cost of all the harbor and river improvements up to the close of 1890 amounted to $40,912,975, but, large as this sum is, it has been contended that the saving effected by the transportation through the lake marine more than pays back this amount to the country in a single season. The calculation made in support of this argument runs somewhat as follows:

According to the computation made by Mr. Keep the average distance over which freight was carried during 1889 was 566 miles. It will not, therefore, be going far outside the probabilities to assume that this distance was the average also for 1890, and on that assumption the total ton-mileage for 1890 was 18,849,681,384 ton-miles, while that for 1889 was 15,542,507,160.

According to the various reports of the principal transportation agencies freight rates on these waters during the year 1890 varied from 3.5 mills per ton-mile to 0.3 mill per ton-mile, the former rate being received on certain high class "package freight" and the latter being the rate on coal over a certain route. The great bulk of the "gross freight" was carried at less than 1 mill per ton-mile, and it is probable that the average rate on all freight was about 1.1 mills per ton-mile. Assuming, however, that it was as high as 1.2 mills, the cost of the total water transportation for 1890 was $22,619,618.

An instructive lesson in comparative statistics is gathered from the fact that the total ton mileage of all the railroads in the United States for the year ending June 30, 1890, was 76,207,047,298 ton-miles, so that the ton-mileage of the Great Lakes and river St. Lawrence for the same year being, as has been seen, 18,849,681,384 ton-miles, the lake ton-mileage was 24.73 per cent of the ton-mileage of all the railroads of the United States. In other words, it would have required 24.73 per cent of the entire railway freight equipment of the railroads in the United States to have transported by rail the cargoes carried by lake vessels in 1890, and this, it must be remembered, is based on the calculation that each of the transportation agencies was employed during the same period of time, while as a matter of fact the railroads ran for 12 months and the lake season extended over but 234 days, or less than 8 months.

REDUCTION IN FREIGHT RATES.

The question of reduction in freight rates is indeed a most interesting one, and it is especially so in the case of grain. In 1859, for instance, it cost an average of 15.75 cents to carry a bushel of corn from Chicago to Buffalo by lake. In 1871 the rate had fallen to 7.50 cents per bushel, while in 1890 it only cost 1.88 cents per bushel. In 1867 it cost an average of $4.25 to carry a ton of iron from Escanaba to Erie, in 1870 it cost $2.50 for the same service, while in 1890 the rate was as low at one time as $0.55, with an average of $0.82 per ton.

A valuable record of the most representative freight rates has been prepared by Mr. W. A. Livingstone, and will be found embodied in the subjoined tables. The titles of these tables are, generally speaking, sufficiently indicative of the matter presented, but one or two explanations are needed, which can be better given in this prefatory manner than in the form of footnotes. It should be understood, for example, that the rate of any previous date held good until the succeeding date when the new rate was made; that the ore rates in the first table include the unloading of the ore, paid by the vessel, and are the rates per gross ton, and that the averages given in all cases are the calculated averages of all the daily rates, and are not the average rates at which the freight was carried:

ORE RATES FROM THE PORTS NAMED TO LAKE ERIE PORTS.

1890

DATES.	Escanaba.	Marquette.	Ashland.
April 10	$1.00	$1.25	$1.35
April 15	0.90	1.20	1.30
May 5	0.90	1.15	1.25
May 20	0.85	1.15	1.20
May 29	0.85	1.10	1.20
July 20	0.85	1.10	1.15
July 24	0.85	1.10	1.10
July 30	0.85	1.05	1.10
August 9	0.85	1.05	1.05
August 15	$0.85	$1.00	$1.00
October 1	0.85	1.00	1.10
October 15	0.90	1.00	1.10
November 4	1.00	1.10	1.15
November 12	1.15	....	1.30
November 25	1.15	....	1.70
Average daily rates	0.890	1.072	1.156
Season contract rates	1.100	1.250	1.350

1891

DATES.	Escanaba.	Marquette.	Ashland.
May 7	$0.70	....	$0.90
May 11	0.65	....	0.90
May 20	0.60	$0.80	0.90
May 25	0.55	0.80	0.90
June 10	0.55	0.80	0.80
June 22	0.60	0.80	0.80
June 23	0.65	0.80	0.80
June 24	0.65	0.90	0.90
July 7	0.65	0.90	1.00
July 14	0.70	0.95	1.00
July 20	0.75	1.00	....
July 23	0.80	1.00	....
July 24	0.85	0.95	1.05
July 30	0.85	1.05	1.10
July 31	0.90	1.10	1.20
August 3	0.95	1.15	1.25
August 4	1.10	1.25	1.35
August 6	1.00	1.10	1.20
August 8	0.95	1.10	1.15
August 12	0.90	1.10	1.10
August 14	0.95	1.10	1.15
August 15	1.00	1.15	1.15
August 17	0.90	1.10	1.15
August 20	0.90	1.05	1.15
August 29	$0.85	$1.00	$1.10
September 1	0.90	1.05	1.15
September 4	0.95	1.10	1.15
September 5	1.00	1.10	1.15
September 22	1.05	1.20	1.30
September 26	1.00	1.20	1.30
September 29	0.95	1.15	1.30
October 1	0.95	1.10	1.30
October 3	0.90	....	....
October 5	0.85	1.00	1.20
October 7	0.80	1.00	1.10
October 10	0.75	0.95	1.00
October 12	0.75	0.85	0.95
October 14	0.75	0.95	1.00
October 22	0.80	1.00	1.10
October 30	0.90	1.15	1.40
November 4	1.00	1.25	1.50
November 6	1.20	1.30	1.50
November 18	1.30	....	....
November 19	1.35	....	....
Average daily rates	0.825	1.004	1.070
Season contracts made on June 4	0.650	0.900	0.900

RATE OF FREIGHT, PER BUSHEL, ON CORN FROM CHICAGO TO BUFFALO.

1890

	CENTS.		CENTS.		CENTS.
March 7	2.875	May 27	1.500	September 5	1.500
March 14	3.250	June 5	1.750	September 12	1.750
March 25	3.500	June 10	2.000	September 29	2.000
April 3	3.250	June 27	2.250	October 14	1.875
April 5	2.875	June 28	2.125	October 16	1.500
April 11	2.500	July 8	2.000	October 22	1.250
April 14	2.250	July 23	2.875	October 25	1.500
April 15	2.000	July 24	1.500	November 6	1.250
April 25	1.750	July 25	1.750	November 18	1.500
April 26	1.500	July 30	1.500	November 19	1.750
April 28	1.250	July 31	1.000	November 20	1.500
April 30	1.500	August 1	1.250	November 21	2.000
May 2	1.750	August 9	1.375	November 28	3.000
May 3	1.500	August 16	1.250	December 3	3.000
May 20	1.250				

1891

	CENTS.		CENTS.		CENTS.
April 10	2.000	August 7	2.750	October 5	1.750
April 17	1.750	August 10	2.500	October 23	2.000
May 2	1.500	August 11	2.250	October 26	2.250
May 8	1.250	August 14	2.500	October 30	2.500
May 9	1.125	September 2	2.750	October 31	2.750
May 13	1.000	September 4	3.000	November 4	3.250
June 29	1.250	September 10	3.250	November 5	3.750
July 7	1.375	September 12	3.000	November 6	4.000
July 13	1.500	September 15	3.250	November 12	3.750
July 14	1.750	September 25	3.000	November 19	4.500
July 28	2.250	September 28	2.750	November 21	4.250
July 30	2.750	September 30	2.500	November 28	4.500
July 31	3.000	October 3	2.250	December 2	4.500

AVERAGES OF DAILY RATES, PER BUSHEL, FOR 6 YEARS.

	CENTS		CENTS.		CENTS.
1886	3.40	1888	2.50	1890	1.88
1887	3.90	1889	2.25	1891	2.13

RATE OF FREIGHT, PER BUSHEL, ON WHEAT FROM DULUTH TO BUFFALO.

1890

	Cents.		Cents.		Cents.
March 28	3.750	June 13	2.250	September 15	2.500
April 11	3.500	June 14	2.000	September 22	2.750
April 23	3.250	June 21	2.500	November 15	3.000
May 7	3.000	June 24	2.750	November 22	4.000
May 10	2.875	June 27	2.500	November 24	4.500
May 13	3.000	July 8	2.750	November 26	5.000
June 3	2.750	July 10	2.500	November 28	5.500
June 5	2.500	July 30	2.250		

1891

	Cents.		Cents.		Cents.
March 16	2.875	August 1	3.000	October 26	4.000
March 18	2.750	August 5	3.500	November 2	4.250
March 24	2.500	August 6	3.250	November 3	5.000
April 22	2.250	September 8	3.500	November 5	5.250
May 9	2.000	September 10	3.750	November 6	6.000
May 16	1.750	September 15	4.000	November 7	7.000
May 18	1.500	September 28	3.500	November 9	7.500
May 20	1.250	October 6	3.250	November 19	8.000
June 9	1.750	October 8	3.000	November 20	8.500
June 12	1.500	October 10	2.500	November 21	9.250
June 13	2.000	October 19	2.750	November 23	9.500
July 7	2.250	October 20	3.000	November 25	9.250
July 13	2.500	October 21	3.500	November 28	9.250

RATES, PER NET TON, FOR CARRYING COAL FROM BUFFALO TO THE PORTS NAMED.

1890

Dates.	Duluth.	Milwaukee.	Chicago.
April 16	$0.40	$0.40	$0.40
April 21	0.35	0.50	0.50
April 30	0.35	0.50	0.60
May 5	0.40	0.50	0.60
May 21	0.35	0.50	0.60
June 13	0.40	0.50	0.60
September 3	0.30	0.50	0.60
November 3	0.40	0.60	0.75
November 9	0.60	0.60	0.75
November 11	0.75	0.75	0.75
November 28	0.75	0.75	1.00
Average rate	0.394	0.521	0.611

1891

Dates.	Duluth.	Milwaukee.	Chicago.
April 14	$0.40	$0.50	$0.60
May 11	0.40	0.60	0.60
July 18	0.40	0.50	0.50
July 20	0.30	0.50	0.50
August 12	0.40	0.50	0.50
August 28	0.30	0.50	0.50
September 2	0.30	0.40	0.40
September 15	0.25	0.40	0.40
September 26	0.25	0.50	0.50
October 28	0.25	0.50	0.60
October 29	0.25	0.60	0.60
November 10	0.10	0.60	0.60
November 18	0.10	0.75	0.75
November 28	0.10	1.00	0.75
Average rate	0.318	0.545	0.557

GENERAL RESULTS.

In the progress of this text the history of transportation on the Great Lakes and river St. Lawrence has been traced from its early beginnings to the year 1890; the comparative statistics of the decade of 1880 and 1889, inclusive, have been treated with some fullness, and much space has been devoted to a review of the industry in its positive form of a report for the period covered by the Eleventh Census. The matter can therefore well be brought to the review standpoint by a consideration of the general results of the traffic, results which have a strong social and political as well as commercial bearing. The extraordinary growth of the country is certainly one of the most striking features in the history of the United States, and it is also certain that one of the pre-eminent factors in making this growth possible has been the rapid extension of the water transportation systems of the Mississippi valley and the lacustrine system. It will show a closer parallelism between the increase of the importance of lake traffic and that of population, if one considers the growth of population in the cities found either directly on the lake shore or situated within a 50-mile zone encircling the lakes. In the whole of the United States there are 448 cities and towns having a population of 8,000 and over, and of these 448 no less than 204 are found in the 8 states to which reference has been made, while within the zone which has been outlined there lie 57 of such cities. The population of the 448 large cities of the United States was 18,284,385 in 1890, that of the 204 cities in the 8 lake states was 10,137,747, while that of the 57 cities lying within the 50-mile zone was 3,184,357, which figures, together with those showing the increase per city for the census year 1880 over that of 1890, are shown in the following table:

TABLE V.—STATEMENT SHOWING THE POPULATION IN 1880 AND 1890 OF CITIES OF 8,000 INHABITANTS AND OVER, LOCATED WITHIN A RADIUS OF 50 MILES OF THE GREAT LAKES AND ST. LAWRENCE RIVER.

LOCALITIES.	1890	1880
Lake Superior	75, 344	14, 212
Ashland, Wisconsin	9, 956	....
Duluth, Minnesota	33, 115	3, 483
Ishpeming, Michigan	11, 197	6, 039
Marquette, Michigan	9, 093	4, 690
Superior, Wisconsin	11, 983	....
Lakes Huron and St. Clair	337, 078	204, 477
Ann Arbor, Michigan	9, 431	8, 061
Alpena, Michigan	11, 283	6, 153
Bay city, Michigan	27, 839	20, 693
Detroit, Michigan	205, 870	116, 340
Flint, Michigan	9, 803	8, 409
Port Huron, Michigan	13, 543	8, 883
Saginaw, Michigan	46, 322	29, 541
West Bay city, Michigan	12, 981	6, 397
Lake Michigan	1, 622, 462	799, 945
Appleton, Wisconsin	11, 869	8, 005
Aurora, Illinois	19, 688	11, 873
Chicago, Illinois	1, 099, 850	503, 185
Elgin, Illinois	17, 823	8, 787
Fond du Lac (Lake Winnebago), Wisconsin	12, 024	13, 094
Green Bay, Wisconsin	9, 069	7, 464
Grand Rapids, Michigan	60, 278	32, 016
Joliet, Illinois	23, 264	11, 657
Iron Mountain, Michigan	8, 599	....
Kankakee, Illinois	9, 025	5, 651
Kalamazoo, Michigan	17, 853	11, 937
Manistee, Michigan	12, 812	6, 930
Marinette, Wisconsin	11, 523	2, 750
Menominee, Michigan	10, 630	3, 288
Michigan, Indiana	10, 776	7, 366
Milwaukee, Wisconsin	204, 468	115, 587
Lake Michigan—Continued.		
Muskegon, Michigan	22, 702	11, 262
Oshkosh (Lake Winnebago), Wisconsin	22, 836	15, 748
Racine, Wisconsin	21, 014	16, 031
Sheboygan, Wisconsin	16, 359	7, 314
Lake Erie	822, 318	509, 142
Adrian, Michigan	8, 756	7, 849
Akron, Ohio	27, 601	16, 512
Ashtabula, Ohio	8, 338	4, 445
Buffalo, New York	255, 664	155, 134
Cleveland, Ohio	261, 353	160, 146
Dunkirk, New York	9, 416	7, 248
Erie, Pennsylvania	40, 634	27, 737
Findlay, Ohio	18, 553	4, 633
Jamestown (Lake Chautauqua), New York	16, 038	9, 357
Mansfield, Ohio	13, 473	9, 859
Meadville, Pennsylvania	9, 520	8, 860
Sandusky, Ohio	18, 471	15, 838
Titusville, Pennsylvania	9, 046	8, 073
Toledo, Ohio	81, 434	50, 137
Tiffin, Ohio	10, 801	7, 879
Youngstown, Ohio	33, 220	15, 435
Lake Ontario and St. Lawrence river	327, 155	230, 952
Auburn, New York	25, 858	21, 924
Lockport, New York	16, 038	13, 522
Ogdensburg, New York	11, 662	10, 341
Oswego, New York	21, 842	21, 116
Rome, New York	14, 991	12, 194
Rochester, New York	133, 896	89, 366
Syracuse, New York	88, 143	51, 792
Watertown, New York	14, 725	10, 697

Remarkable as has been the increase of this urban population, generally considered, the reader can not fail to note the extraordinary fact that 3 of these large cities, Ashland, Superior, and Iron Mountain, have sprung into existence during the decade 1880–1890, while Duluth's growth has been from so small a beginning to so large a result that it can almost be considered in the same category. This practical creation of 4 populous cities is mainly if not entirely due to the development in the production of iron ore in the Lake Superior and Lake Michigan districts. In this connection the figures in the following paragraph, which have been compiled from official returns, are at once pertinent and instructive.

In 1889 there were 592 iron-ore producing mines in the United States which reported to the bureau of statistics, of which 89 were in the Lake Superior district. The product of the 592 mines was 14,518,041 long tons of ore, which, at an average value of $2.30 per ton, means a total value of $33,351,978. The product of the Lake Superior district amounted to 6,693,568 tons, valued at $16,641,429. The port of Escanaba does not appear in the preceding list of cities having a population of over 8,000, but it undoubtedly belongs to the list of those cities whose growth is due almost entirely to lake traffic in iron ore. From this port 3,364,067 tons of iron ore were shipped in 1889 and 4,171,210 tons in 1890. During the same year Bilbao, in Spain, shipped 4,272,918 tons, but as Bilbao is an open port for the whole year, its shipments were at the rate of 356,077 tons per month, while the lake port, being open but 10 months in the year, shipped at the rate of 417,121 tons per month, making Escanaba, therefore, the greatest ore port in the world.

LAKE LANDINGS AND DISTANCES.

As in the case of the report on the rivers of the Mississippi valley, this text can not be brought to a better conclusion than by giving a list of the principal trading points on the Great Lakes and St. Lawrence river, with the distances from port to port:

LAKE AND RIVER LANDINGS BETWEEN OGDENSBURG AND DULUTH (DISTANCES FROM OGDENSBURG).

	MILES.
Cape Vincent, Lake Ontario	68
Kingston, Lake Ontario (Canada)	69
Oswego, Lake Ontario	115
Fair Haven, Lake Ontario	134
Charlotte, Lake Ontario	158
Toronto, Lake Ontario (Canada)	222
Port Dalhousie, Lake Ontario (Canada)	330
Port Colborne, Lake Erie (Canada)	256
Buffalo, Lake Erie	276
Erie, Lake Erie	321
Ashtabula, Lake Erie	358
Cleveland, Lake Erie	412
Sandusky, Lake Erie	458
Toledo, Lake Erie	491
Detroit, Detroit river (Lake St. Clair)	493
Port Huron, St. Clair river (Lake Huron)	553
Sand Beach, Lake Huron	615
Goderich, Lake Huron (Canada)	616
Oscoda, Lake Huron	666
Tawas, Lake Huron	672
Saginaw river, Lake Huron	700
Alpena, Lake Huron	709
Cheboygan, Lake Huron	787
Mackinac, Lake Huron	794
Owen sound, Lake Huron (Canada)	800
Collingwood, Lake Huron (Canada)	818
Midland, Lake Huron (Canada)	827
Sault Ste. Marie, Lake Superior	838
Traverse, Lake Michigan	897
Escanaba, Lake Michigan	935
Manistee, Lake Michigan	950
Ludington, Lake Michigan	978
Manitowoc, Lake Michigan	993
Marquette, Lake Superior	997
Green Bay, Lake Michigan	1,002
Sheboygan, Lake Michigan	1,017
Copper Harbor, Lake Superior	1,027
Muskegon, Lake Michigan	1,043
Grand Haven, Lake Michigan	1,045
L'Anse, Lake Superior	1,054
Houghton, Lake Superior	1,058
Milwaukee, Lake Michigan	1,062
St. Joseph, Lake Michigan	1,102
Ontonagon, Lake Superior	1,109
Chicago, Lake Michigan	1,132
Port Arthur, Lake Superior (Canada)	1,108
Bayfield, Lake Superior	1,173
Ashland, Lake Superior	1,186
Duluth, Lake Superior	1,235

LAKE AND RIVER LANDINGS BETWEEN BUFFALO AND OGDENSBURG (DISTANCES FROM BUFFALO).

Port Colborne, Lake Erie (Canada)	20
Toronto, Lake Ontario (Canada)	77
Port Dalhousie, Lake Ontario (Canada)	97
Charlotte, Lake Ontario	127
Fair Haven, Lake Ontario	180
Oswego, Lake Ontario	190
Kingston, Lake Ontario (Canada)	207
Cape Vincent, Lake Ontario	208
Ogdensburg, St. Lawrence river	276

LAKE AND RIVER LANDINGS BETWEEN BUFFALO AND DULUTH (DISTANCES FROM BUFFALO).

Erie, Lake Erie	80
Ashtabula, Lake Erie	116
Cleveland, Lake Erie	174
Put in Bay, Lake Erie	215
Sandusky, Lake Erie	217
Toledo, Lake Erie	252
Detroit, Detroit river (Lake St. Clair)	255
Port Huron, St. Clair river (Lake Huron)	315
Sand Beach, Lake Huron	377
Goderich, Lake Huron (Canada)	378
Oscoda, Lake Huron	428
Tawas, Lake Huron	434
Saginaw river, Lake Huron	463
Alpena, Lake Huron	471
Cheboygan, Lake Huron	549
Mackinac, Lake Huron	556
Owen sound, Lake Huron (Canada)	562
Collingwood, Lake Huron (Canada)	580
Midland, Lake Huron (Canada)	589
Sault Ste. Marie, Lake Superior	600
Traverse, Lake Michigan	658
Escanaba, Lake Michigan	697
Manistee, Lake Michigan	712
Ludington, Lake Michigan	739
Manitowoc, Lake Michigan	755
Marquette, Lake Superior	759
Green Bay, Lake Michigan	764
Sheboygan, Lake Michigan	779
Copper Harbor, Lake Superior	789
Muskegon, Lake Michigan	805
Grand Haven, Lake Michigan	807
L'Anse, Lake Superior	816
Houghton, Lake Superior	820
Milwaukee, Lake Michigan	824
St. Joseph, Lake Michigan	864
Port Arthur, Lake Superior (Canada)	870
Ontonagon, Lake Superior	871
Chicago, Lake Michigan	889
Bayfield, Lake Superior	935
Ashland, Lake Superior	948
Duluth, Lake Superior	997

LAKE AND RIVER LANDINGS BETWEEN CLEVELAND AND OGDENSBURG (DISTANCES FROM CLEVELAND).

Ashtabula, Lake Erie	56
Erie, Lake Erie	99
Port Colborne, Lake Erie (Canada)	156
Buffalo, Lake Erie	174
Port Dalhousie, Lake Ontario (Canada)	193
Toronto, Lake Ontario (Canada)	212
Charlotte, Lake Ontario	273
Fair Haven, Lake Ontario	316
Oswego, Lake Ontario	326
Kingston, Lake Ontario (Canada)	343
Cape Vincent, Lake Ontario	344
Ogdensburg, St. Lawrence river	412

LAKE AND RIVER LANDINGS BETWEEN CLEVELAND AND DULUTH (DISTANCES FROM CLEVELAND).

	MILES.
Sandusky, Lake Erie	56
Put in Bay, Lake Erie	64
Toledo, Lake Erie	100
Detroit, Detroit river (Lake St. Clair)	105
Port Huron, St. Clair river (Lake Huron)	165
Sand Beach, Lake Huron	227
Goderich, Lake Huron (Canada)	228
Oscoda, Lake Huron	278
Tawas, Lake Huron	284
Saginaw river, Lake Huron	312
Alpena, Lake Huron	321
Cheboygan, Lake Huron	399
Mackinac, Lake Huron	406
Owen sound, Lake Huron (Canada)	412
Collingwood, Lake Huron (Canada)	430
Midland, Lake Huron (Canada)	439
Sault Ste. Marie, Lake Superior	450
Traverse, Lake Michigan	509
Escanaba, Lake Michigan	547
Manistee, Lake Michigan	562
Ludington, Lake Michigan	590
Manitowoc, Lake Michigan	605
Marquette, Lake Superior	609
Green Bay, Lake Michigan	614
Sheboygan, Lake Michigan	629
Copper Harbor, Lake Superior	639
Muskegon, Lake Michigan	655
Grand Haven, Lake Michigan	657
L'Anse, Lake Superior	666
Houghton, Lake Superior	670
Milwaukee, Lake Michigan	674
St. Joseph, Lake Michigan	714
Port Arthur, Lake Superior (Canada)	720
Ontonagon, Lake Superior	721
Chicago, Lake Michigan	739
Bayfield, Lake Superior	785
Ashland, Lake Superior	798
Duluth, Lake Superior	847

LAKE AND RIVER LANDINGS BETWEEN DETROIT AND OGDENSBURG (DISTANCES FROM DETROIT).

Put in Bay, Lake Erie	50
Toledo, Lake Erie	57
Sandusky, Lake Erie	68
Cleveland, Lake Erie	105
Ashtabula, Lake Erie	147
Erie, Lake Erie	185
Port Colborne, Lake Erie (Canada)	237
Buffalo, Lake Erie	255
Port Dalhousie, Lake Ontario (Canada)	264
Toronto, Lake Ontario (Canada)	294
Charlotte, Lake Ontario	354
Fair Haven, Lake Ontario	397
Oswego, Lake Ontario	407
Kingston, Lake Ontario (Canada)	424
Cape Vincent, Lake Ontario	425
Ogdensburg, St. Lawrence river	493

LAKE AND RIVER LANDINGS BETWEEN DETROIT AND DULUTH (DISTANCES FROM DETROIT).

Port Huron, St. Clair river (Lake Huron)	60
Sand Beach, Lake Huron	122
Goderich, Lake Huron (Canada)	123
Oscoda, Lake Huron	173
Tawas, Lake Huron	179
Saginaw river, Lake Huron	207
Alpena, Lake Huron	216
Cheboygan, Lake Huron	294
Mackinac, Lake Huron	303
Owen sound, Lake Huron (Canada)	307
Collingwood, Lake Huron (Canada)	325
Midland, Lake Huron (Canada)	334
Sault Ste. Marie, Lake Superior	345
Traverse, Lake Michigan	404
Escanaba, Lake Michigan	442
Manistee, Lake Michigan	457
Ludington, Lake Michigan	485
Manitowoc, Lake Michigan	500
Marquette, Lake Superior	504
Green Bay, Lake Michigan	509
Sheboygan, Lake Michigan	524
Copper Harbor, Lake Superior	534
Muskegon, Lake Michigan	550
Grand Haven, Lake Michigan	552
L'Anse, Lake Superior	561
Houghton, Lake Superior	565
Milwaukee, Lake Michigan	569
St. Joseph, Lake Michigan	609
Port Arthur, Lake Superior (Canada)	615
Ontonagon, Lake Superior	616
Chicago, Lake Michigan	634
Bayfield, Lake Superior	680
Ashland, Lake Superior	693
Duluth, Lake Superior	742

LAKE AND RIVER LANDINGS BETWEEN CHEBOYGAN AND OGDENSBURG (DISTANCES FROM CHEBOYGAN).

Alpena, Lake Huron	100
Oscoda, Lake Huron	126
Tawas, Lake Huron	145
Sand Beach, Lake Huron	173
Saginaw river, Lake Huron	190
Goderich, Lake Huron (Canada)	200
Owen sound, Lake Huron (Canada)	212
Collingwood, Lake Huron (Canada)	230
Port Huron, St. Clair river (Lake Huron)	234
Midland, Lake Huron (Canada)	239
Detroit, Detroit river (Lake St. Clair)	294
Put in Bay, Lake Erie	344
Toledo, Lake Erie	351
Sandusky, Lake Erie	362
Cleveland, Lake Erie	399
Ashtabula, Lake Erie	441
Erie, Lake Erie	479
Port Colborne, Lake Erie (Canada)	539
Buffalo, Lake Erie	549
Port Dalhousie, Lake Ontario (Canada)	558
Toronto, Lake Ontario (Canada)	588
Charlotte, Lake Ontario	648
Fair Haven, Lake Ontario	691
Oswego, Lake Ontario	701
Kingston, Lake Ontario (Canada)	718
Cape Vincent, Lake Ontario	719
Ogdensburg, St. Lawrence river	784

LAKE AND RIVER LANDINGS BETWEEN CHEBOYGAN AND DULUTH (DISTANCES FROM CHEBOYGAN).

Mackinac, Lake Huron	17
Sault Ste. Marie, Lake Superior	93
Traverse, Lake Michigan	112
Escanaba, Lake Michigan	150
Manistee, Lake Michigan	165
Ludington, Lake Michigan	193
Manitowoc, Lake Michigan	208
Green Bay, Lake Michigan	217
Sheboygan, Lake Michigan	232
Marquette, Lake Superior	252
Muskegon, Lake Michigan	258
Grand Haven, Lake Michigan	260
Milwaukee, Lake Michigan	277
Copper Harbor, Lake Superior	282
L'Anse, Lake Superior	309
Houghton, Lake Superior	313
St. Joseph, Lake Michigan	317
Chicago, Lake Michigan	342
Port Arthur, Lake Superior (Canada)	363
Ontonagon, Lake Superior	364
Bayfield, Lake Superior	428
Ashland, Lake Superior	441
Duluth, Lake Superior	490

LAKE AND RIVER LANDINGS BETWEEN GRAND HAVEN AND OGDENSBURG (DISTANCES FROM GRAND HAVEN).

	MILES.
Muskegon, Lake Michigan	20
Ludington, Lake Michigan	68
Manistee, Lake Michigan	93
Green Bay, Lake Michigan	184
Escanaba, Lake Michigan	193
Traverse, Lake Michigan	210
Mackinac, Lake Huron	246
Sheboygan, Lake Michigan	260
Alpena, Lake Huron	358
Oscoda, Lake Huron	384
Tawas, Lake Huron	403
Sand Beach, Lake Huron	431
Saginaw river, Lake Huron	448
Goderich, Lake Huron (Canada)	458
Owen sound, Lake Huron (Canada)	469
Collingwood, Lake Huron (Canada)	487
Port Huron, St. Clair river (Lake Huron)	492
Midland, Lake Huron (Canada)	496
Detroit, Detroit river (Lake St. Clair)	552
Put in Bay, Lake Erie	602
Toledo, Lake Erie	609
Sandusky, Lake Erie	620
Cleveland, Lake Erie	657
Ashtabula, Lake Erie	699
Erie, Lake Erie	737
Port Colborne, Lake Erie (Canada)	789
Buffalo, Lake Erie	807
Port Dalhousie, Lake Ontario (Canada)	816
Toronto, Lake Ontario (Canada)	846
Charlotte, Lake Ontario	906
Fair Haven, Lake Ontario	949
Oswego, Lake Ontario	959
Kingston, Lake Ontario (Canada)	976
Cape Vincent, Lake Ontario	977
Ogdensburg, St. Lawrence river	1,045

LAKE AND RIVER LANDINGS BETWEEN GRAND HAVEN AND DULUTH (DISTANCES FROM GRAND HAVEN).

St. Joseph, Lake Michigan	68
Milwaukee, Lake Michigan	85
Sheboygan, Lake Michigan	88
Manitowoc, Lake Michigan	103
Chicago, Lake Michigan	109
Sault Ste. Marie, Lake Superior	339
Marquette, Lake Superior	498
Copper Harbor, Lake Superior	528
L'Anse, Lake Superior	555
Houghton, Lake Superior	559
Port Arthur, Lake Superior (Canada)	609
Ontonagon, Lake Superior	610
Bayfield, Lake Superior	674
Ashland, Lake Superior	687
Duluth, Lake Superior	736

LAKE AND RIVER LANDINGS BETWEEN CHICAGO AND OGDENSBURG (DISTANCES FROM CHICAGO).

St. Joseph, Lake Michigan	61
Milwaukee, Lake Michigan	84
Grand Haven, Lake Michigan	109
Muskegon, Lake Michigan	120
Sheboygan, Lake Michigan	128
Manitowoc, Lake Michigan	156
Ludington, Lake Michigan	157
Manistee, Lake Michigan	182
Green Bay, Lake Michigan	*a*255
Escanaba, Lake Michigan	280
Traverse, Lake Michigan	298
Mackinac, Lake Huron	329
Cheboygan, Lake Huron	342
Alpena, Lake Huron	440
Oscoda, Lake Huron	466
Tawas, Lake Huron	485
Sand Beach, Lake Huron	513
Saginaw river, Lake Huron	530
Goderich, Lake Huron (Canada)	540
Owen sound, Lake Huron (Canada)	552
Collingwood, Lake Huron (Canada)	570
Port Huron, St. Clair river (Lake Huron	574
Midland, Lake Huron (Canada)	579
Detroit, Detroit river (Lake St. Clair)	634
Put in Bay, Lake Erie	684
Toledo, Lake Erie	691
Sandusky, Lake Erie	702
Cleveland, Lake Erie	739
Ashtabula, Lake Erie	781
Erie, Lake Erie	819
Port Colborne, Lake Erie (Canada)	871
Buffalo, Lake Erie	889
Port Dalhousie, Lake Ontario (Canada)	898
Toronto, Lake Ontario (Canada)	928
Charlotte, Lake Ontario	988
Fair Haven, Lake Ontario	1,031
Oswego, Lake Ontario	1,041
Kingston, Lake Ontario (Canada)	1,058
Cape Vincent, Lake Ontario	1,059
Ogdensburg, St. Lawrence river	1,127

LAKE AND RIVER LANDINGS BETWEEN CHICAGO AND DULUTH (DISTANCES FROM CHICAGO).

Sault Ste. Marie, Lake Superior	422
Marquette, Lake Superior	581
Copper Harbor, Lake Superior	611
L'Anse, Lake Superior	638
Houghton, Lake Superior	642
Port Arthur, Lake Superior (Canada)	692
Ontonagon, Lake Superior	693
Bayfield, Lake Superior	*b*757
Ashland, Lake Superior	*b*770
Duluth, Lake Superior	819

LAKE AND RIVER LANDINGS BETWEEN MILWAUKEE AND OGDENSBURG (DISTANCES FROM MILWAUKEE).

Sheboygan, Lake Michigan	52
Manitowoc, Lake Michigan	77
Grand Haven, Lake Michigan	85
Muskegon, Lake Michigan	85
St. Joseph, Lake Michigan	97
Ludington, Lake Michigan	98
Manistee, Lake Michigan	117
Green Bay, Lake Michigan	*a*178
Escanaba, Lake Michigan	202
Traverse, Lake Michigan	222
Mackinac, Lake Huron	266
Cheboygan, Lake Huron	277
Alpena, Lake Huron	375
Oscoda, Lake Huron	401
Tawas, Lake Huron	420
Sand Beach, Lake Huron	448
Saginaw river, Lake Huron	465
Goderich, Lake Huron (Canada)	475
Owen sound, Lake Huron (Canada)	489
Collingwood, Lake Huron (Canada)	507
Port Huron, St. Clair river (Lake Huron)	509
Midland, Lake Huron (Canada)	516
Detroit, Detroit river (Lake St. Clair)	569
Put in Bay, Lake Erie	619
Toledo, Lake Erie	626
Sandusky, Lake Erie	637
Cleveland, Lake Erie	674
Ashtabula, Lake Erie	716
Erie, Lake Erie	754
Port Colborne, Lake Erie (Canada)	806
Buffalo, Lake Erie	824
Port Dalhousie, Lake Ontario (Canada)	833
Toronto, Lake Ontario (Canada)	863
Charlotte, Lake Ontario	923
Fair Haven, Lake Ontario	966
Oswego, Lake Ontario	976
Kingston, Lake Ontario (Canada)	993
Cape Vincent, Lake Ontario	994
Ogdensburg, St. Lawrence river	1,062

LAKE AND RIVER LANDINGS BETWEEN MILWAUKEE AND DULUTH (DISTANCES FROM MILWAUKEE).

Chicago, Lake Michigan	84
Sault Ste. Marie, Lake Superior	359
Marquette, Lake Superior	518
Copper Harbor, Lake Superior	548
L'Anse, Lake Superior	575
Houghton, Lake Superior	579
Port Arthur, Lake Superior (Canada)	629
Ontonagon, Lake Superior	630
Bayfield, Lake Superior	694
Ashland, Lake Superior	707
Duluth, Lake Superior	756

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a Through Sturgeon Bay canal.

b Through Portage canal.

LAKE AND RIVER LANDINGS BETWEEN MARQUETTE AND OGDENSBURG (DISTANCES FROM MARQUETTE).

	MILES.
Sault Ste. Marie, Lake Superior	159
Cheboygan, Lake Huron	252
Mackinac, Lake Huron	259
Alpena, Lake Huron	309
Oscoda, Lake Huron	336
Traverse Lake Michigan	352
Tawas, Lake Huron	359
Sand Beach, Lake Huron	386
Escanaba, Lake Michigan	392
Saginaw river, Lake Huron	395
Manistee, Lake Michigan	402
Muskegon, Lake Michigan	405
Owen sound, Lake Huron (Canada)	409
Goderich, Lake Huron (Canada)	412
Ludington, Lake Michigan	427
Collingwood, Lake Huron (Canada)	427
Midland, Lake Huron (Canada)	436
Port Huron, St. Clair river (Lake Huron)	444
Manitowoc, Lake Michigan	448
Green Bay, Lake Michigan	453
Sheboygan, Lake Michigan	468
Grand Haven, Lake Michigan	498
Detroit, Detroit river (Lake St. Clair)	504
Milwaukee, Lake Michigan	518
Put in Bay, Lake Erie	554
St. Joseph, Lake Michigan	556
Toledo, Lake Erie	561
Sandusky, Lake Erie	572
Chicago, Lake Michigan	581
Cleveland, Lake Erie	609
Ashtabula, Lake Erie	651
Erie, Lake Erie	689
Port Colborne, Lake Erie (Canada)	741
Buffalo, Lake Erie	759
Port Dalhousie, Lake Ontario (Canada)	768
Toronto, Lake Ontario (Canada)	798
Charlotte, Lake Ontario	858
Fair Haven, Lake Ontario	901
Oswego, Lake Ontario	911
Kingston, Lake Ontario (Canada)	928
Cape Vincent, Lake Ontario	929
Ogdensburg, St. Lawrence river	997

LAKE AND RIVER LANDINGS BETWEEN MARQUETTE AND DULUTH (DISTANCES FROM MARQUETTE).

Copper Harbor, Lake Superior	78
L'Anse, Lake Superior	79
Houghton, Lake Superior	*a*82
Ontonagon, Lake Superior	141
Port Arthur, Lake Superior (Canada)	172
Bayfield, Lake Superior	*a*207
Ashland, Lake Superior	*a*219
Duluth, Lake Superior	*a*266

LAKE AND RIVER LANDINGS BETWEEN DULUTH AND OGDENSBURG (DISTANCES FROM DULUTH).

Bayfield, Lake Superior	80
Ashland, Lake Superior	94
Ontonagon, Lake Superior	138
Houghton, Lake Superior	*a*178
Copper Harbor, Lake Superior	206
L'Anse, Lake Superior	*a*209
Marquette, Lake Superior	*a*266
Sault Ste. Marie, Lake Superior	397
Cheboygan, Lake Huron	490
Mackinac, Lake Huron	497
Alpena, Lake Huron	547
Oscoda, Lake Huron	574
Traverse, Lake Michigan	590
Tawas, Lake Huron	597
Sand Beach, Lake Huron	624
Escanaba, Lake Michigan	630
Saginaw river, Lake Huron	633
Manistee, Lake Michigan	640
Muskegon, Lake Michigan	643
Owen sound, Lake Huron (Canada)	647
Goderich, Lake Huron (Canada)	650
Collingwood, Lake Huron (Canada)	655
Ludington, Lake Michigan	665
Midland, Lake Huron (Canada)	674
Port Huron, St. Clair river (Lake Huron)	682
Manitowoc, Lake Michigan	686
Green Bay, Lake Michigan	691
Sheboygan, Lake Michigan	706
Grand Haven, Lake Michigan	736
Detroit, Detroit river (Lake St. Clair)	742
Milwaukee, Lake Michigan	756
Put in Bay, Lake Erie	792
St. Joseph, Lake Michigan	794
Toledo, Lake Erie	799
Sandusky, Lake Erie	810
Chicago, Lake Michigan	819
Cleveland, Lake Erie	847
Ashtabula, Lake Erie	889
Erie, Lake Erie	927
Port Colborne, Lake Erie (Canada)	979
Buffalo, Lake Erie	997
Port Dalhousie, Lake Ontario (Canada)	1,006
Toronto, Lake Ontario (Canada)	1,036
Charlotte, Lake Ontario	1,096
Fair Haven, Lake Ontario	1,139
Oswego, Lake Ontario	1,149
Kingston, Lake Ontario (Canada)	1,166
Cape Vincent, Lake Ontario	1,167
Ogdensburg, St. Lawrence river	1,235

a Through Portage canal.

STATISTICAL TABLES.

EQUIPMENT, OCCUPATION, AND CONSTRUCTION.

TABLE 1.—EQUIPMENT OF FLEETS IN GENERAL—NUMBER, TONNAGE, AND VALUE OF ALL STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT FORMING THE LAKE FLEETS AND CREDITED TO THE RESPECTIVE PORTS OF HAIL, WITH TOTALS FOR EACH LAKE AND ST. LAWRENCE RIVER.

PORTS.	TOTAL OF ALL CRAFT.			STEAMERS.			SAILING VESSELS.			UNRIGGED CRAFT.		
	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.
Total	2, 737	920, 294	$48, 580, 174	1, 467	595, 813	$40, 868, 824	962	185, 081	$4, 238, 850	308	139, 400	$3, 472, 500
Lake Superior	167	39, 653	2, 763, 500	126	29, 257	2, 344, 300	31	2. 784	74, 200	10	7, 612	345, 000
Ashland, Wisconsin	1	73	5, 000	1	73	5, 000						
Baraga, Michigan	3	1, 319	44, 000	1	35	6, 000				2	1, 284	38, 000
Bayfield, Wisconsin	1	291	6, 000				1	291	6, 000			
Duluth, Minnesota	39	4, 386	338, 300	35	1, 614	161, 800	1	88	1, 500	3	2, 684	175, 000
Marquette, Michigan	111	20, 759	1, 532, 200	81	18, 028	1, 461, 500	29	2, 405	66, 700	1	326	4, 000
Pequaming, Michigan	4	2, 082	124, 000	2	1, 069	79, 000				2	1, 013	45, 000
Republic, Michigan	4	5, 314	239, 000	2	3, 009	156, 000				2	2, 305	83, 000
St. Marys Falls, Michigan	2	477	25, 000	2	477	25, 000						
Superior, Wisconsin	2	4, 952	450, 000	2	4, 952	450, 000						
Lakes Huron and St. Clair	726	262, 833	13, 107, 650	340	152, 463	10, 521, 600	213	34, 119	812, 050	173	76, 251	1, 774, 000
Algonac, Michigan	6	2, 345	46, 000							6	2, 345	46, 000
Alpena, Michigan	9	4, 984	166, 400	1	1, 117	100, 000				8	3, 867	66, 400
Bay city, Michigan	56	31, 176	1, 146, 100	11	7, 286	447, 500	7	3, 625	127, 400	38	20, 265	571, 200
Caseville, Michigan	1	298	4, 000				1	298	4, 000			
Cheboygan, Michigan	2	83	7, 500	2	83	7, 500						
Detroit, Michigan	275	129, 768	7, 547, 800	144	88, 906	6, 594, 000	87	19, 475	416, 500	44	21, 387	537, 300
East China, Michigan	2	1, 449	67, 000							2	1, 449	67, 000
East Saginaw, Michigan	30	13, 261	419, 600	6	3, 999	251, 500	2	776	14, 000	22	8, 486	154, 100
Marine, Michigan	23	9, 875	230, 800	1	1, 119	50, 000	5	2, 038	40, 500	17	6, 718	140, 300
Mount Clemens, Michigan	2	504	1, 500							2	504	1, 500
New Baltimore, Michigan	2	147	11, 000	2	147	11, 000						
Oscoda, Michigan	3	1, 289	17, 000				1	591	12, 000	2	698	5, 000
Port Huron, Michigan	293	61, 482	3, 253, 950	165	48, 042	2, 953, 100	106	6, 381	184, 150	22	7, 059	116, 700
Saginaw, Michigan	10	2, 829	88, 500	4	1, 004	64, 000	1	252	500	5	1, 573	24, 000
St. Clair, Michigan	12	3, 343	100, 500	4	760	43, 000	3	683	13, 000	5	1, 900	44, 500
Lake Michigan	1, 003	196, 216	9, 114, 400	453	101, 800	7, 227, 600	500	76, 577	1, 485, 300	50	17, 839	401, 500
Benton Harbor, Michigan	3	699	39, 500	2	655	38, 500	1	44	1, 000			
Charlevoix, Michigan	6	488	12, 800	2	83	7, 000	4	405	5, 800			
Chicago, Illinois	339	71, 260	3, 088, 350	156	28, 810	2, 257, 800	163	35, 940	712, 550	20	6, 510	118, 000
Escanaba, Michigan	5	1, 615	52, 000	1	448	25, 000	4	1, 167	27, 000			
Fort Howard, Wisconsin	2	222	5, 500				2	222	5, 500			
Frankfort, Michigan	1	7	1, 000	1	7	1, 000						
Grand Haven, Michigan	225	22, 308	1, 608, 650	147	16, 861	1, 447, 300	77	4, 829	123, 350	1	618	38, 000
Green Bay, Wisconsin	10	3, 300	115, 000	4	995	59, 000	3	955	27, 500	3	1, 350	28, 500
Holland, Michigan	2	220	3, 000				2	220	3, 000			
Kenosha, Wisconsin	19	7, 378	358, 900	6	4, 037	304, 000	12	3, 145	52, 900	1	196	2, 000
Kewaunee, Wisconsin	1	160	3, 000				1	160	3, 000			
Ludington, Michigan	4	752	12, 000				4	752	12, 000			
Manistee, Michigan	11	2, 732	54, 000	1	530	25, 000	9	1, 890	25, 000	1	312	4, 000
Manitowoc, Wisconsin	15	1, 775	34, 600				15	1, 775	34, 600			
Menominee, Michigan	1	277	2, 500							1	277	2, 500
Milwaukee, Wisconsin	259	61, 694	3, 205, 000	123	46, 405	2, 908, 500	130	13, 043	247, 500	6	2, 246	49, 000
Montague, Michigan	2	217	4, 000				2	217	4, 000			
Muskegon, Michigan	17	3, 088	63, 100	2	504	24, 000	15	2, 584	39, 100			
Northport, Michigan	1	63	7, 000	1	63	7, 000						
Onekama, Michigan	1	146	3, 500							1	146	3, 500
Pentwater, Michigan	2	260	4, 500				2	260	4, 500			
Peshtigo, Wisconsin	3	1, 704	52, 500							3	1, 704	52, 500
Petoskey, Michigan	1	123	12, 000	1	123	12, 000						
Racine, Wisconsin	26	6, 932	145, 400				15	2, 883	47, 400	11	4, 049	98, 000
St. James, Michigan	1	81	1, 500				1	81	1, 500			
St. Joseph, Michigan	2	164	1, 000				2	164	1, 000			
Saugatuck, Michigan	3	647	33, 500	3	647	33, 500						
Sheboygan, Wisconsin	25	4, 115	79, 900				24	3, 914	76, 900	1	201	3, 000
South Haven, Michigan	4	374	5, 100				4	374	5, 100			
Spring Lake, Michigan	2	345	8, 000				2	345	8, 000			
Sturgeon Bay, Wisconsin	2	550	5, 000				1	320	2, 500	1	230	2, 500
Suttons Bay, Michigan	1	232	3, 000				1	232	3, 000			
Traverse, Michigan	1	336	20, 000	1	336	20, 000						
Troy, Wisconsin	1	301	7, 000				1	301	7, 000			
Waukegan, Illinois	2	1, 296	58, 000	2	1, 296	58, 000						
Waukesha, Wisconsin	1	48	600				1	48	600			
Whitehall, Michigan	2	307	4, 000				2	307	4, 000			

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 1.—EQUIPMENT OF FLEETS IN GENERAL, ETC.—Continued.

PORTS.	TOTAL OF ALL CRAFT.			STEAMERS.			SAILING VESSELS.			UNRIGGED CRAFT.		
	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.
Lake Erie	667	392, 903	$22, 163, 824	449	296, 034	$19, 583, 124	151	61, 097	$1, 647, 700	67	35, 772	$933, 000
Ashtabula, Ohio	4	175	27, 000	4	175	27, 000						
Avon, Ohio	1	264	5, 000				1	264	5, 000			
Buffalo, New York	204	128, 860	8, 235, 124	167	109, 575	7, 760, 124	17	10, 376	290, 500	20	8, 909	184, 500
Cleveland, Ohio	219	163, 227	8, 802, 800	133	119, 969	7, 579, 500	67	30, 956	871, 300	19	12, 302	352, 000
Dunkirk, New York	3	522	29, 000	2	498	27, 500	1	24	1, 500			
Erie, Pennsylvania	37	29, 454	1, 759, 900	33	28, 142	1, 723, 000	3	487	11, 900	1	825	25, 000
Fairport, Ohio	5	316	17, 000	3	81	13, 500	2	235	3, 500			
Fremont, Ohio	2	20	1, 800	2	20	1, 800						
Gratwick, Ohio	1	538	28, 000							1	538	28, 000
Huron, Ohio	12	5, 091	274, 700	8	3, 532	226, 000	3	649	13, 700	1	910	35, 000
Lorain, Ohio	18	8, 621	321, 500	3	1, 802	157, 500	13	5, 442	119, 500	2	1, 377	44, 500
Milan, Ohio	6	6, 824	323, 500	2	2, 988	200, 000	3	1, 989	58, 500	1	1, 847	65, 000
Norwalk, Ohio	2	1, 344	51, 000	1	723	35, 000				1	621	16, 000
Port Clinton, Ohio	1	56	5, 000	1	56	5, 000						
Put in Bay, Ohio	1	168	6, 000	1	168	6, 000						
Suspension Bridge, New York	3	346	19, 000	2	305	18, 000	1	41	1, 000			
Sandusky, Ohio	64	18, 303	865, 200	42	13, 331	764, 200	17	3, 567	85, 000	[illegible]	1, 405	16, 000
Toledo, Ohio	59	18. 027	907, 300	32	9, 968	726, 000	20	5, 107	129, 300	7	2, 952	52, 000
Tonawanda, New York	19	5, 696	287, 000	12	3, 100	223, 000				7	2, 596	64, 000
Vermilion, New York	6	5, 051	198, 000	1	1, 601	90, 000	3	1, 960	57, 000	2	1, 490	51, 000
Lake Ontario	131	15, 859	676, 300	66	5, 407	460, 700	63	10, 018	210, 600	2	434	5, 000
Cape Vincent, New York	52	2, 220	126, 500	24	886	94, 000	28	1, 334	32, 500			
Charlotte, New York												
Chaumont, New York	1	309	6, 000				1	309	6, 000			
Hamlin, New York	1	175	3, 000				1	175	3, 000			
Henderson, New York	1	246	4, 000				1	246	4, 000			
Medina, New York	1	9	2, 000	1	9	2, 000						
Oswego, New York	42	8. 842	402, 000	22	3, 433	289, 800	20	5, 409	112, 200			
Pultneyville, New York	1	80	1, 500				1	80	1, 500			
Rochester, New York	21	2, 276	90, 900	16	999	70, 000	4	951	16, 400	1	326	4, 500
Sacketts Harbor, New York	5	521	7, 700	1	12	1, 200	3	401	6, 000	1	108	500
Sodus Point, New York	2	296	8, 000	1	18	2, 000	1	278	6, 000			
Troy, New York	1	555	18, 000				1	555	18, 000			
Wilson, New York	2	280	5, 000				2	280	5, 000			
Youngstown, New York	1	50	1, 700	1	50	1, 700						
St. Lawrence river	43	12, 830	754, 500	33	10, 852	731, 500	4	486	9, 000	6	1, 492	14, 000
Alexandria Bay, New York	3	37	5, 000	3	37	5, 000						
Clayton, New York	7	1, 328	69, 500	5	904	61, 000	2	424	8, 500			
Ogdensburg, New York	33	11, 465	680, 000	25	9, 911	665, 500	2	62	500	6	1, 492	14, 000

TABLE 2.—EQUIPMENT OF FLEETS BY CLASSES—NUMBER, TONNAGE, AND VALUE OF ALL STEAMERS, SAILING INDICATIVE OF

	PORTS.	TOTAL EQUIPMENT.			STEAMERS.								
					Side-wheel passenger.			Propellers carrying both passengers and freight.			Propellers carrying freight only.		
		Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.
1	Total	2,737	920,294	$48,580,174	62	27,259	$2,600,500	303	143,907	$10,971,124	433	388,978	$23,438,700
2	Lake Superior	167	39,653	2,763,500				29	12,313	1,091,000	15	13,517	898,500
3	Ashland, Wisconsin	1	73	5,000				1	73	5,000			
4	Baraga, Michigan	3	1,319	44,000									
5	Bayfield, Wisconsin	1	291	6,000									
6	Duluth, Minnesota	39	4,386	338,300				7	714	47,500	1	42	4,000
7	Marquette, Michigan	111	20,759	1,532,200				19	10,521	954,500	[illegible]	5,209	279,500
8	Pequaming, Michigan	4	2,082	124,000				1	764	70,000	1	305	9,000
9	Republic, Michigan	4	5,314	239,000							2	3,009	156,000
10	St. Marys Falls, Michigan	2	477	25,000				1	241	14,000			
11	Superior, Wisconsin	2	4,952	450,000							2	4,952	450,000
12	Lakes Huron and St. Clair	726	262,833	13,107,650	23	17,729	1,864,500	43	17,972	1,296,500	138	104,477	6,221,500
13	Algonac, Michigan	[illegible]	2,345	46,000									
14	Alpena, Michigan	9	4,984	166,400				1	1,117	100,000			
15	Bay city, Michigan	56	31,176	1,146,100	2	865	30,000	3	2,035	127,500	5	4,374	289,000
16	Caseville, Michigan	1	298	4,000									
17	Cheboygan, Michigan	2	83	7,500	1	47	6,000	1	36	1,500			
18	Detroit, Michigan	275	129,768	7.547,800	18	16,425	1,817,000	17	8,565	661,500	56	56,994	3,422,500
19	East China, Michigan	2	1,449	67,000									
20	East Saginaw, Michigan	30	13,261	419,600	2	392	11,500	4	3,607	240,000			
21	Marine, Michigan	23	9,875	230,800							1	1,119	50,000
22	Mount Clemens, Michigan	2	504	1,500									
23	New Baltimore, Michigan	2	147	11,000				2	147	11,000			
24	Oscoda, Michigan	3	1,289	17,000									
25	Port Huron, Michigan	293	61,482	3,253,950				11	1,887	120,000	73	40,840	2,392,000
26	Saginaw, Michigan	10	2,829	88,500				1	137	7,000	2	831	53,000
27	St. Clair, Michigan	12	3,343	100,500				3	441	28,000	1	319	15,000
28	Lake Michigan	1,003	196,216	9,114,400	22	5,879	501,500	96	28,256	2,048,500	105	57,027	3,511,000
29	Benton Harbor, Michigan	3	699	39,500				2	655	38,500			
30	Charlevoix, Michigan	[illegible]	488	12,800				2	83	7,000			
31	Chicago, Illinois	339	71,260	3,088,350	5	523	39,000	34	13,181	1,075,500	28	10,960	673,000
32	Escanaba, Michigan	5	1,615	52,000				1	448	25,000			
33	Fort Howard, Wisconsin	2	222	5,500									
34	Frankfort, Michigan	1	7	1,000									
35	Grand Haven, Michigan	225	22,308	1.608,650	6	1,659	204,000	31	5,750	450,000	23	6,305	464,500
36	Green Bay, Wisconsin	10	3,300	115,000	1	95	4,000	3	900	55,000			
37	Holland, Michigan	2	220	3,000									
38	Kenosha, Wisconsin	19	7,378	358,900	4	2,459	194,000	2	1,578	110,000			
39	Kewaunee, Wisconsin	1	160	3,000									
40	Ludington, Michigan	4	752	12,000									
41	Manistee, Michigan	11	2,732	54,000	1	530	25,000						
42	Manitowoc, Wisconsin	15	1,775	34,600									
43	Menominee, Michigan	1	277	2,500									
44	Milwaukee, Wisconsin	259	61,694	3,205.000	5	613	35,500	12	3,282	166,000	53	39,172	2,340,500
45	Montague, Michigan	2	217	4,000									
46	Muskegon, Michigan	17	3,088	63,100				2	504	24,000			
47	Northport, Michigan	1	63	7,000				1	63	7,000			
48	Onekama, Michigan	1	146	3,500									
49	Pentwater, Michigan	2	260	4,500									
50	Peshtigo, Wisconsin	3	1,704	52,500									
51	Petoskey, Michigan	1	123	12,000				1	123	12,000			
52	Racine, Wisconsin	26	6,932	145,400									
53	St. James, Michigan	1	81	1,500									
54	St. Joseph, Michigan	2	164	1,000									
55	Saugatuck, Michigan	3	647	33,500				3	647	33,500			
56	Sheboygan, Wisconsin	25	4,115	79,900									
57	South Haven, Michigan	4	374	5,100									
58	Spring Lake, Michigan	2	345	8,000									
59	Sturgeon Bay, Wisconsin	2	550	5,000									
60	Suttons Bay, Michigan	1	232	3.000									
61	Traverse, Michigan	1	336	20,000				1	336	20,000			
62	Troy, Wisconsin	1	301	7,000									
63	Waukegan, Illinois	2	1,296	58,000				1	706	25,000	1	590	33,000
64	Waukesha, Wisconsin	1	48	600									
65	Whitehall, Michigan	2	307	4,000									
66	Lake Erie	667	392,903	22,163,824	10	2,221	144,000	91	83,818	6,342,724	166	202,224	12,065,700
67	Ashtabula, Ohio	4	175	27,000									
68	Avon, Ohio	1	264	5,000									
69	Buffalo, New York	204	128,860	8,235,124				43	34,542	2,767,424	50	72,066	4,546,000
70	Cleveland, Ohio	219	163,227	8,802,800				19	33,986	2,540,000	66	83,979	4,795,500
71	Dunkirk, New York	3	522	29,000	1	36	4,000				1	460	25,000

AND CONSTRUCTION—Continued.

VESSELS, AND UNRIGGED CRAFT REPORTED ON IN THE PRECEDING TABLE, BUT DIVIDED INTO CLASSES OCCUPATION AND RIG.

STEAMERS—continued.						SAIL AND UNRIGGED VESSELS.									
Tugs.			All other classes.			Schooners.			Lake barges.			All other classes.			
Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	
489	24,451	$2,556,300	180	11,218	$1,302,200	917	184,029	$4,217,200	301	138,404	$3,463,500	52	2,048	$30,650	1
67	2,849	306,300	15	578	48,500	31	2,784	74,200	10	7,612	345,000				2
															3
1	35	6,000							2	1,284	38,000				4
						1	291	6,000							5
22	722	97,800	5	136	12,500	1	88	1,500	3	2,684	175,000				6
43	1,856	191,500	10	442	36,000	29	2,405	66,700	1	326	4,000				7
									2	1,013	45,000				8
									2	2,305	83,000				9
1	236	11,000													10
															11
102	8,383	639,600	34	3,902	499,500	203	33,639	805,500	171	75,849	1,772,500	12	882	8,050	12
									6	2,345	46,000				13
									8	3,867	66,400				14
1	12	1,000				7	3,625	127,400	38	20,265	571,200				15
						1	298	4,000							16
															17
34	3,671	272,000	19	3,251	421,000	83	19,074	411,900	44	21,387	537,300	4	401	4,600	18
									2	1,449	67,000				19
						2	776	14,000	22	8,486	154,100				20
						5	2,038	40,500	17	6,718	140,300				21
									1	364	500	1	140	1,000	22
															23
						1	591	12,000	2	698	5,000				24
66	4,664	362,600	15	651	78,500	100	6,302	182,200	21	6,797	116,200	7	341	2,450	25
1	36	4,000				1	252	500	5	1,573	24,000				26
						3	683	13,000	5	1,900	44,500				27
184	7,949	836,100	46	2,689	330,500	488	76,442	1,481,500	46	17,353	394,500	16	621	10,800	28
						1	44	1,000							29
						4	405	5,800							30
74	2,469	298,800	15	1,677	171,500	155	35,859	710,000	18	6,255	115,000	10	336	5,550	31
						4	1,167	27,000							32
						2	222	5,500							33
1	7	1,000													34
64	2,572	261,800	23	575	67,000	74	4,784	122 400	1	618	38,000	3	45	950	35
						3	955	27,500	3	1,350	28,500				36
						2	220	3,000							37
						12	3,145	52,900	1	196	2.000				38
						1	160	3,000							39
						4	752	12,000							40
						[illegible]	1,890	25,000	1	312	4,000				41
						15	1,775	34,600							42
									1	277	2,500				43
45	2,901	274,500	8	437	92,000	129	13,034	247,200	[illegible]	2,246	49,000	1	9	300	44
						2	217	4,000							45
						15	2,584	39,100							46
															47
												1	146	3,500	48
						2	260	4,500							49
									3	1,704	52,500				50
															51
						15	2,883	47,400	10	3,964	97,500	1	85	500	52
						1	81	1,500							53
						2	164	1,000							54
															55
						24	3,914	76,900	1	201	3,000				56
						4	374	5,100							57
						2	345	8,000							58
						1	320	2,500	1	230	2,500				59
						1	232	3,000							60
															61
						1	301	7,000							62
															63
						1	48	600							64
						2	307	4,000							65
123	4,806	702,000	59	2,965	328,700	148	61,014	1,645,200	67	35,772	933,000	3	83	2,500	66
4	175	27,000													67
						1	264	5,000							68
54	2,057	317,500	20	910	129,200	17	10,376	290,500	20	8,909	184,500				69
29	1,002	134,000	18	966	106,000	64	30,873	868,800	19	12,302	352,000	3	83	2,500	70
			1	38	2,500	1	24	1,500							71

EQUIPMENT, OCCUPATION, AND

TABLE 2.—EQUIPMENT OF FLEETS

	PORTS.	TOTAL EQUIPMENT.			STEAMERS.								
					Side-wheel passengers.			Propellars carrying both passengers and freight.			Propellers carrying freight only.		
		Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.
	Lake Erie—Continued.												
1	Erie, Pennsylvania	37	29, 454	$1, 759, 900				[illegible]	5, 004	$330, 500	14	22, 633	$1, 347, 000
2	Fairport, Ohio	5	316	17, 000									
3	Fremont, Ohio	2	20	1, 800				1	11	800			
4	Gratwick, Ohio	1	538	28, 000									
5	Huron, Ohio	12	5, 091	274, 700							2	3, 433	204, 000
6	Lorain, Ohio	18	8, 621	321, 500							1	1, 759	150, 000
7	Milan, Ohio	[illegible]	6, 824	323, 500				1	2, 279	140, 000	1	709	60, 000
8	Norwalk, Ohio	2	1, 344	51, 000							1	723	35, 000
9	Port Clinton, Ohio	1	56	5, 000									
10	Put in Bay, Ohio	1	168	6, 000	1	168	$6, 000						
11	Suspension Bridge, New York	3	346	19, 000							1	276	15, 000
12	Sandusky, Ohio	64	18, 303	865, 200	6	1, 273	99, 000	9	495	45, 500	19	11, 274	583, 200
13	Toledo, Ohio	59	18, 027	907, 300	2	744	35, 000	4	4, 528	318, 500	9	3, 311	215, 000
14	Tonawanda, New York	19	5, 696	287, 000				5	2, 973	200, 000			
15	Vermilion, New York	6	5, 051	198, 000							1	1, 601	90, 000
16	Lake Ontario	131	15, 859	676, 300	4	553	32, 500	32	1, 155	155, 900	3	2, 906	174, 000
17	Cape Vincent, New York	52	2, 220	126, 500	2	85	14, 000	15	586	56, 500	1	72	4, 000
18	Charlotte, New York												
19	Chaumont, New York	1	309	6, 000									
20	Hamlin, New York	1	175	3, 000									
21	Henderson, New York	1	246	4, 000									
22	Medina, New York	1	9	2, 000									
23	Oswego, New York	42	8, 842	402, 000				7	225	68, 500	2	2, 834	170, 000
24	Pultneyville, New York	1	80	1, 500									
25	Rochester, New York	21	2, 276	90, 900	2	468	18, 500	7	264	26, 000			
26	Sacketts Harbor, New York	5	521	7, 700				1	12	1, 200			
27	Sodus Point, New York	2	296	8, 000				1	18	2, 000			
28	Troy, New York	1	555	18, 000									
29	Wilson, New York	2	280	5, 000									
30	Youngstown, New York	1	50	1, 700				1	50	1, 700			
31	St. Lawrence river	43	12, 830	754, 500	3	877	58, 000	12	393	36, 500	6	8, 827	568, 000
32	Alexandria Bay, New York	3	37	5, 000				3	37	5, 000			
33	Clayton, New York	7	1, 328	69, 500	3	877	58, 000	2	27	3, 000			
34	Ogdensburg, New York	33	11, 465	680, 000				7	329	28, 500	6	8, 827	568, 000

CONSTRUCTION—Continued.

BY CLASSES, ETC.—Continued.

STEAMERS—continued.						SAIL AND UNRIGGED VESSELS.									
Tugs.			All other classes.			Schooners.			Lake barges.			All other classes.			
Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	
4	103	$16,000	6	402	$29,500	3	487	$11,900	1	825	$25,000	......	......	......	1
2	60	10,500	1	15	3,000	2	235	3,500	......	......	......	......	......	......	2
......	......	......	1	9	1,000	......	......	......	......	......	......	......	......	......	3
......	......	......	......	......	......	......	......	......	1	538	28,000	......	......	......	4
......	......	......	6	99	22,000	3	649	13,700	1	910	35,000	......	......	......	5
2	43	7,500	......	......	......	13	5,442	119,500	2	1,377	44,500	......	......	......	6
......	......	......	......	......	......	3	1,989	58,500	1	1,847	65,000	......	......	......	7
......	......	......	......	......	......	......	......	......	1	621	16,000	......	......	......	8
1	56	5,000	......	......	......	......	......	......	......	......	......	......	......	......	9
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	10
1	29	3,000	......	......	......	1	41	1,000	......	......	......	......	......	......	11
5	232	26,000	3	57	10,500	17	3,567	85,000	5	1,405	16,000	......	......	......	12
14	916	132,500	3	469	25,000	20	5,107	129,300	7	2,952	52,000	......	......	......	13
7	127	23,000	......	......	......	......	......	......	7	2,596	64,000	......	......	......	14
......	......	......	......	......	......	3	1,960	57,000	2	1,490	51,000	......	......	......	15
8	185	36,800	19	608	61,500	45	9,726	202,300	1	326	4,500	19	400	$8,800	16
......	......	......	6	143	19,500	12	1,058	24,600	......	......	......	16	276	7,900	17
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	18
......	......	......	......	......	......	1	309	6,000	......	......	......	......	......	......	19
......	......	......	......	......	......	1	175	3,000	......	......	......	......	......	......	20
......	......	......	......	......	......	1	246	4,000	......	......	......	......	......	......	21
......	......	......	1	9	2,000	......	......	......	......	......	......	......	......	......	22
8	185	36,800	5	189	14,500	18	5,393	111,800	......	......	......	2	16	400	23
......	......	......	......	......	......	1	80	1,500	......	......	......	......	......	......	24
......	......	......	7	267	25,500	4	951	16,400	1	326	4,500	......	......	......	25
......	......	......	......	......	......	3	401	6,000	......	......	......	1	108	500	26
......	......	......	......	......	......	1	278	6,000	......	......	......	......	......	......	27
......	......	......	......	......	......	1	555	18,000	......	......	......	......	......	......	28
......	......	......	......	......	......	2	280	5,000	......	......	......	......	......	......	29
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	30
5	279	35,500	7	476	33,500	2	424	8,500	6	1,492	14,000	2	62	500	31
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	32
......	......	......	......	......	......	2	424	8,500	......	......	......	......	......	......	33
5	279	35,500	7	476	33,500	......	......	......	6	1,492	14,000	2	62	500	34

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 3.—PERCENTAGES OF TONNAGE AND VALUATION—NUMBER, GROSS AND NET TONNAGE, AND ESTIMATED CARRYING CAPACITY, COMMERCIAL VALUATION AND VALUE PER GROSS TON OF ALL STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT; ARRANGED BY PERCENTAGES OF TONNAGE AND VALUATION APPLIED TO THE LAKES AND ST. LAWRENCE RIVER BY CLASS ENTRIES.

ALL LAKES AND ST. LAWRENCE RIVER.

CLASSES OF VESSELS.	Number.	TONNAGE.					VALUATION.			
		Gross.	Percentage of—		Net.	Estimated carrying capacity.	Commercial.	Percentage of—		Per ton, gross.
			Total tonnage on Great Lakes.	Total tonnage of class named on all the lakes.				Total valuation on Great Lakes.	Total valuation of class named on all the lakes.	
All classes	2,737	920.294	100.00	100.00	776,817	1,248,784	$48,580,174	100.00	100.00	$53
Steamers:										
Side-wheel passenger	62	27,259	2.96	100.00	19,465	27,633	2,600,500	5.35	100.00	95
Propellers carrying both passengers and freight.	303	143,907	15.64	100.00	112,585	157,035	10,971,124	22.58	100.00	76
Propellers carrying freight only	433	388,978	42.26	100.00	314,875	453,574	23,438,700	48.25	100.00	60
Tugs	489	24,451	2.66	100.00	14,292	14,352	2,556,300	5.26	100.00	105
Ferry	40	4,702	0.51	100.00	2,933	3,849	498,000	1.03	100.00	106
Pleasure yachts	54	2,121	0.23	100.00	1,320	1,128	312,700	0.64	100.00	147
Pile drivers	15	247	0.03	100.00	150	77	53,500	0.11	100.00	217
Sand dredges	4	398	0.04	100.00	295	431	14,000	0.03	100.00	35
Sand boats	1	81	0.01	100.00	71	102	5,000	0.01	100.00	62
Fire boats	7	631	0.07	100.00	319	354	195,000	0.40	100.00	309
Steam lighters	4	392	0.04	100.00	368	339	14,000	0.03	100.00	36
Unclassified steam vessels	55	2,646	0.29	100.00	1,913	1,895	210,000	0.43	100.00	79
Sail and unrigged vessels:										
Schooners	917	184,029	20.00	100.00	174,869	334,360	4,217,200	8.68	100.00	23
Lake barges	301	138,404	15.04	100.00	131,407	249,847	3,463,500	7.13	100.00	25
Scows	7	996	0.11	100.00	952	1,833	9,000	0.02	100.00	9
Sloops	44	1,035	0.11	100.00	986	1,943	21,350	0.05	100.00	21
Yawls	1	17		100.00	17	32	300		100.00	18

LAKE SUPERIOR.

CLASSES OF VESSELS.	Number.	Gross.	Total tonnage on Great Lakes.	Total tonnage of class named on all the lakes.	Net.	Estimated carrying capacity.	Commercial.	Total valuation on Great Lakes.	Total valuation of class named on all the lakes.	Per ton, gross.
All classes	167	39,653	100.00	4.31	31,902	47,001	2,763,500	100.00	5.69	70
Steamers:										
Side-wheel passenger										
Propellers carrying both passengers and freight.	29	12,313	31.05	8.56	9,176	11,390	1,091,000	39.48	9.95	89
Propellers carrying freight only	15	13,517	34.09	3.47	10,666	14,666	898,500	32.51	3.83	66
Tugs	67	2,849	7.18	11.65	1,607	1,322	306,300	11.08	11.98	108
Ferry	6	365	0.92	7.76	265	310	23,500	0.85	4.72	64
Pleasure yachts	4	123	0.31	5.80	81	41	17,500	0.63	5.60	142
Pile drivers										
Sand dredges										
Sand boats										
Fire boats										
Steam lighters										
Unclassified steam vessels	5	90	0.23	3.40	50	26	7,500	0.27	3.57	83
Sail and unrigged vessels:										
Schooners	31	2,784	7.02	1.51	2,669	5,143	74,200	2.69	1.76	27
Lake barges	10	7,612	19.20	5.50	7,388	14,103	345,000	12.49	9.96	45
Scows										
Sloops										
Yawls										

LAKES HURON AND ST. CLAIR.

CLASSES OF VESSELS.	Number.	Gross.	Total tonnage on Great Lakes.	Total tonnage of class named on all the lakes.	Net.	Estimated carrying capacity.	Commercial.	Total valuation on Great Lakes.	Total valuation of class named on all the lakes.	Per ton, gross.
All classes	726	262,833	100.00	28.56	220,588	366,971	13,107,650	100.00	26.98	50
Steamers:										
Side-wheel passenger	23	17,729	6.74	65.04	12,570	17,828	1,864,500	14.22	71.70	105
Propellers carrying both passengers and freight.	43	17,972	6.84	12.49	13,391	19,656	1,296,500	9.89	11.82	72
Propellers carrying freight only	138	104,477	39.75	26.86	82,692	120,202	6,221,500	47.47	26.55	60
Tugs	102	8,383	3.19	34.28	5,068	6,092	639,600	4.88	25.02	76
Ferry	16	3,436	1.31	73.07	2,103	2,939	410,000	3.13	82.33	119
Pleasure yachts	11	367	0.14	17.30	249	128	74,000	0.56	23.66	202
Pile drivers	1	5		2.02	5	3	4,000	0.03	7.48	800
Sand dredges										
Sand boats										
Fire boats										
Steam lighters										
Unclassified steam vessels	6	94	0.04	3.55	50	27	11,500	0.09	5.48	122
Sail and unrigged vessels:										
Schooners	203	33,639	12.80	18.28	31,836	61,962	805,500	6.15	19.10	24
Lake barges	171	75,849	28.86	54.80	71,787	136,534	1,772,500	13.52	51.18	23
Scows	2	402	0.15	40.36	382	732	1,500	0.01	16.67	4
Sloops	10	480	0.18	46.38	455	868	6,550	0.05	30.68	14
Yawls										

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 3.—PERCENTAGES OF TONNAGE AND VALUATION, ETC.—Continued.

LAKE MICHIGAN.

CLASSES OF VESSELS.	Number.	TONNAGE.					VALUATION.			
		Gross.	Percentage of—		Net.	Estimated carrying capacity.	Commercial.	Percentage of—		Per ton, gross.
			Total tonnage on Great Lakes.	Total tonnage of class named on all the lakes.				Total valuation on Great Lakes.	Total valuation of class named on all the lakes.	
All classes	1,003	196,216	100.00	21.32	167,037	280,464	$9,114,400	100.00	18.76	$46
Steamers:										
Side-wheel passenger	22	5,879	3.00	21.56	4,501	6,257	501,500	5.50	19.28	85
Propellers carrying both passengers and freight.	[illegible]	28,256	14.40	19.64	22,044	30,909	2,048,500	22.48	18.67	72
Propellers carrying freight only	105	57,027	29.06	14.66	44,215	65,613	3,511,000	38.52	14.98	62
Tugs	184	7,949	4.05	32.51	4,649	4,582	836,100	9.17	32.71	105
Ferry	10	234	0.12	4.98	144	80	29,500	0.32	5.92	126
Pleasure yachts	4	163	0.08	7.69	109	113	26,000	0.29	8.31	160
Pile drivers										
Sand dredges										
Sand boats										
Fire boats	5	432	0.22	68.46	219	240	135,000	1.48	69.23	313
Steam lighters										
Unclassified steam vessels	27	1,860	0.95	70.29	1,394	1,569	140,000	1.54	66.67	75
Sail and unrigged vessels:										
Schooners	488	76,442	38.96	41.54	72,630	138,463	1.481.500	16.25	35.13	19
Lake barges	46	17,353	8.84	12.54	16,534	31,397	394,500	4.33	11.39	23
Scows	4	486	0.25	48.80	467	906	7,000	0.08	77.78	14
Sloops	12	135	0.07	13.04	131	335	3,800	0.04	17.80	28
Yawls										

LAKE ERIE.

CLASSES OF VESSELS.	Number.	Gross.	Total tonnage on Great Lakes.	Total tonnage of class named on all the lakes.	Net.	Estimated carrying capacity.	Commercial.	Total valuation on Great Lakes.	Total valuation of class named on all the lakes.	Per ton, gross.
All classes	667	392,903	100.00	42.69	332,991	518,134	22,163,824	100.00	45.63	56
Steamers:										
Side-wheel passenger	10	2,221	0.57	8.15	1,505	2,482	144,000	0.65	5.54	65
Propellers carrying both passengers and freight.	91	83,818	21.33	58.24	67,056	94,470	6,342.724	28.62	57.81	76
Propellers carrying freight only	166	202,224	51.47	51.99	167,518	241,707	12,065,700	54.44	51.48	60
Tugs	123	4,806	1.22	19.66	2,734	2,180	702,000	3.17	27.46	146
Ferry	5	284	0.07	6.04	189	229	19,000	0.09	3.82	67
Pleasure yachts	20	1,056	0.27	49.79	653	730	136,700	0.62	43.72	129
Pile drivers	14	242	0.06	97.98	145	74	49,500	0.22	92.52	205
Sand dredges	4	398	0.10	100.00	295	431	14,000	0.06	100.00	35
Sand boats	1	81	0.02	100.00	71	102	5,000	0.02	100.00	62
Fire boats	2	199	0.05	31.54	100	114	60,000	0.27	30.77	302
Steam lighters	4	392	0.10	100.00	368	339	14,000	0.06	100.00	36
Unclassified steam vessels	9	313	0.08	11.83	229	176	30,500	0.14	14.52	97
Sail and unrigged vessels:										
Schooners	148	61,014	15.53	33.15	58,099	110,486	1,645,200	7.42	39.01	27
Lake barges	67	35,772	9.11	25.85	33,950	64,464	933,000	4.21	26.94	26
Scows										
Sloops	2	66	0.02	6.38	62	118	2,200	0.01	10.30	33
Yawls	1	17		100.00	17	32	300		100.00	18

LAKE ONTARIO.

CLASSES OF VESSELS.	Number.	Gross.	Total tonnage on Great Lakes.	Total tonnage of class named on all the lakes.	Net.	Estimated carrying capacity.	Commercial.	Total valuation on Great Lakes.	Total valuation of class named on all the lakes.	Per ton, gross.
All classes	131	15,859	100.00	1.72	13,699	23,272	676,300	100.00	1.39	43
Steamers:										
Side-wheel passenger	4	553	3.49	2.03	397	442	32,500	4.81	1.25	59
Propellers carrying both passengers and freight.	32	1,155	7.28	0.80	685	482	155,900	23.05	1.42	135
Propellers carrying freight only	3	2,906	18.32	0.75	2,209	3,199	174,000	25.73	0.74	60
Tugs	[illegible]	185	1.17	0.76	93	49	36,800	5.44	1.44	199
Ferry	1	109	0.69	2.32	95	137	2,000	0.30	0.40	18
Pleasure yachts	13	339	2.14	15.98	192	98	51,000	7.54	16.31	150
Pile drivers										
Sand dredges										
Sand boats										
Fire boats										
Steam lighters										
Unclassified steam vessels	5	160	1.01	6.05	107	55	8,500	1.26	4.05	53
Sail and unrigged vessels:										
Schooners	45	9,726	61.33	5.29	9,232	17,521	202,300	29.91	4.80	21
Lake barges	1	326	2.05	0.23	310	589	4,500	0.66	0.13	14
Scows	1	108	0.68	10.84	103	195	500	0.07	5.55	5
Sloops	18	292	1.84	28.21	276	505	8,300	1.23	38.88	28
Yawls										

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 3.—PERCENTAGES OF TONNAGE AND VALUATION—Continued.

ST. LAWRENCE RIVER.

CLASSES OF VESSELS.	Number.	TONNAGE.					VALUATION.			
		Gross.	Percentage of—		Net.	Estimated carrying capacity.	Commercial.	Percentage of—		Per ton, gross.
			Total tonnage on Great Lakes.	Total tonnage of class named on all the lakes				Total valuation on Great Lakes.	Total valuation of class named on all the lakes.	
All classes	43	12,830	100.00	1.40	10,600	12,942	$754,500	100.00	1.55	$59
Steamers:										
Side-wheel passenger	3	877	6.84	3.22	492	624	58,000	7.69	2.23	66
Propellers carrying both passengers and freight.	12	393	3.06	0.27	233	128	36,500	4.84	0.33	93
Propellers carrying freight only	6	8,827	68.80	2.27	7,575	8,187	568,000	75.28	2.42	64
Tugs	5	279	2.17	1.14	141	127	35,500	4.70	1.39	127
Ferry	2	274	2.14	5.83	137	154	14,000	1.86	2.81	51
Pleasure yachts	2	73	0.57	3.44	36	18	7,500	0.99	2.40	103
Pile drivers										
Sand dredges										
Sand boats										
Fire boats										
Steam lighters										
Unclassified steam vessels	3	129	1.01	4.88	83	42	12,000	1.59	5.71	93
Sail and unrigged vessels:										
Schooners	2	424	3.30	0.23	403	785	8,500	1.13	0.20	20
Lake barges	6	1,492	11.63	1.08	1,438	2,760	14,000	1.85	0.40	9
Scows										
Sloops	2	62	0.48	5.99	62	117	500	0.07	2.34	8
Yawls										

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 4.—OCCUPATION BY CLASS GROUPS—NUMBER, GROSS AND NET TONNAGE, AND ESTIMATED CARRYING CAPACITY COMMERCIAL VALUE, AND VALUE PER GROSS TON OF ALL STEAMERS, SAILING VESSELS, AND UNRIGGED CRAFT; GROUPED BY CLASSES, AND ENTERED BY CLASS TOTALS FOR EACH OF THE LAKES AND ST. LAWRENCE RIVER.

LAKES AND RIVER.	Number.	Gross tonnage.	Net tonnage.	Estimated carrying capacity (tons).	Commercial valuation.	Valuation per gross ton.
Summary of entire lake fleet	2, 737	920, 294	776, 817	1, 248, 784	$48, 580, 174	$53
SIDE-WHEEL PASSENGER STEAMERS.						
Total	62	27, 259	19, 465	27, 633	2, 600, 500	95
Lake Superior						
Lakes Huron and St. Clair	23	17, 729	12. 570	17, 828	1, 864, 500	105
Lake Michigan	22	5, 879	4, 501	6, 257	501, 500	85
Lake Erie	10	2, 221	1, 505	2, 482	144, 000	65
Lake Ontario	4	553	397	442	32, 500	59
St. Lawrence river	3	877	492	624	58, 000	66
PROPELLERS CARRYING BOTH PASSENGERS AND FREIGHT.						
Total	303	143, 907	112, 585	157, 035	10, 971, 124	76
Lake Superior	29	12, 313	9, 176	11, 390	1, 091, 000	89
Lakes Huron and St. Clair	43	17, 972	13, 391	19, 656	1, 296, 500	72
Lake Michigan	96	28, 256	22, 044	30, 909	2, 048, 500	72
Lake Erie	91	83, 818	67, 056	94, 470	6, 342, 724	76
Lake Ontario	32	1, 155	685	482	155, 900	135
St. Lawrence river	12	393	233	128	36, 500	93
PROPELLERS CARRYING FREIGHT ONLY.						
Total	433	388, 978	314, 875	453, 574	23, 438, 700	60
Lake Superior	15	13, 517	10, 666	14, 666	898, 500	66
Lakes Huron and St. Clair	138	104, 477	82, 692	120, 202	6, 221, 500	60
Lake Michigan	105	57, 027	44, 215	65, 613	3, 511, 000	62
Lake Erie	166	202, 224	167, 518	241, 707	12, 065, 700	60
Lake Ontario	3	2, 906	2, 209	3, 199	174, 000	60
St. Lawrence river	6	8, 827	7, 575	8, 187	568, 000	64
TUGS.						
Total	489	24, 451	14, 292	14, 352	2, 556, 300	105
Lake Superior	67	2, 849	1, 607	1, 322	306, 300	108
Lakes Huron and St. Clair	102	8, 383	5, 068	6, 092	639, 600	76
Lake Michigan	184	7, 949	4, 649	4, 582	836, 100	105
Lake Erie	123	4, 806	2, 734	2, 180	702, 000	146
Lake Ontario	8	185	93	49	36, 800	199
St. Lawrence river	5	279	141	127	35, 500	127
FERRY.						
Total	40	4, 702	2, 933	3, 819	498, 000	106
Lake Superior	[illegible]	365	265	310	23, 500	64
Lakes Huron and St. Clair	16	3, 436	2, 103	2, 939	410, 000	119
Lake Michigan	10	234	144	80	29, 500	126
Lake Erie	5	284	189	229	19, 000	67
Lake Ontario	1	109	95	137	2, 000	18
St. Lawrence river	2	274	137	154	14, 000	51
PLEASURE YACHTS.						
Total	54	2, 121	1, 320	1, 128	312, 700	147
Lake Superior	4	123	81	41	17, 500	142
Lakes Huron and St. Clair	11	367	249	128	74, 000	202
Lake Michigan	4	163	109	113	26, 000	160
Lake Erie	20	1, 056	653	730	136, 700	129
Lake Ontario	13	339	192	98	51, 000	150
St. Lawrence river	2	73	36	18	7, 500	103

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 4.—OCCUPATION BY CLASS GROUPS—Continued.

PILE DRIVERS.

LAKES AND RIVER.	Number.	Gross tonnage.	Net tonnage.	Estimated carrying capacity (tons).	Commercial valuation.	Valuation per gross ton.
Total	15	247	150	77	$53,500	$217
Lake Superior						
Lakes Huron and St. Clair	1	5	5	3	4,000	800
Lake Michigan						
Lake Erie	14	242	145	74	49,500	205
Lake Ontario						
St. Lawrence river						

SAND DREDGES.

Total	4	398	295	431	14,000	35
Lake Superior						
Lakes Huron and St. Clair						
Lake Michigan						
Lake Erie	4	398	295	431	14,000	35
Lake Ontario						
St. Lawrence river						

SAND BOATS.

Total	1	81	71	102	5,000	62
Lake Superior						
Lakes Huron and St. Clair						
Lake Michigan						
Lake Erie	1	81	71	102	5,000	62
Lake Ontario						
St. Lawrence river						

FIRE BOATS.

Total	7	631	319	354	195,000	309
Lake Superior						
Lakes Huron and St. Clair						
Lake Michigan	5	432	219	240	135,000	313
Lake Erie	2	199	100	114	60,000	302
Lake Ontario						
St. Lawrence river						

STEAM LIGHTERS.

Total	4	392	368	339	14,000	36
Lake Superior						
Lakes Huron and St. Clair						
Lake Michigan						
Lake Erie	4	392	368	339	14,000	36
Lake Ontario						
St. Lawrence river						

UNCLASSIFIED STEAM VESSELS.

Total	55	2,646	1,913	1,895	210,000	79
Lake Superior	5	90	50	26	7,500	83
Lakes Huron and St. Clair	6	94	50	27	11,500	122
Lake Michigan	27	1,860	1,394	1,569	140,000	75
Lake Erie	9	313	229	176	30,500	97
Lake Ontario	5	160	107	55	8,500	53
St. Lawrence river	3	129	83	42	12,000	93

SCHOONERS.

Total	917	184,029	174,869	334,360	4,217,200	23
Lake Superior	31	2,784	2,669	5,143	74,200	27
Lakes Huron and St. Clair	203	33,639	31,836	61,962	805,500	24
Lake Michigan	488	76,442	72,630	138,463	1,481,500	19
Lake Erie	148	61,014	58,099	110,486	1,645,200	27
Lake Ontario	45	9,726	9,232	17.521	202.300	21
St. Lawrence river	2	424	403	785	8,500	20

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 4.—OCCUPATION BY CLASS GROUPS—Continued.

LAKE BARGES.

LAKES AND RIVER.	Number.	Gross tonnage.	Net tonnage.	Estimated carrying capacity (tons).	Commercial valuation.	Valuation per gross ton.
Total	301	138, 464	131, 407	249, 847	$3, 463, 500	$25
Lake Superior	10	7, 612	7, 388	14, 103	345, 000	45.
Lakes Huron and St. Clair	171	75, 849	71, 787	136, 534	1, 772, 500	23
Lake Michigan	46	17, 353	16, 534	31, 397	394, 500	23
Lake Erie	67	35, 772	33, 950	64, 464	933, 000	26.
Lake Ontario	1	326	310	589	4, 500	14
St. Lawrence river	6	1, 492	1, 438	2, 760	14, 000	9

SCOWS.

LAKES AND RIVER.	Number.	Gross tonnage.	Net tonnage.	Estimated carrying capacity (tons).	Commercial valuation.	Valuation per gross ton.
Total	7	996	952	1, 833	9, 000	9
Lake Superior						
Lakes Huron and St. Clair	2	402	382	732	1, 500	4
Lake Michigan	4	486	467	906	7, 000	14
Lake Erie						
Lake Ontario	1	108	103	195	500	5.
St. Lawrence river						

SLOOPS.

LAKES AND RIVER.	Number.	Gross tonnage.	Net tonnage.	Estimated carrying capacity (tons).	Commercial valuation.	Valuation per gross ton.
Total	44	1, 035	986	1, 943	21, 350	21
Lake Superior						
Lakes Huron and St. Clair	10	480	455	868	6, 550	14
Lake Michigan	12	135	131	335	3, 800	28.
Lake Erie	2	66	62	118	2, 200	33
Lake Ontario	18	292	276	505	8, 300	28.
St. Lawrence river	2	62	62	117	500	8.

YAWLS.

LAKES AND RIVER.	Number.	Gross tonnage.	Net tonnage.	Estimated carrying capacity (tons).	Commercial valuation.	Valuation per gross ton.
Total	1	17	17	32	300	18.
Lake Superior						
Lakes Huron and St. Clair						
Lake Michigan						
Lake Erie	1	17	17	32	300	18.
Lake Ontario						
St. Lawrence river						

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 5.—CONSTRUCTION BY LOCALITIES—MATERIAL, NUMBER, TONNAGE, VALUE, AND AVERAGES OF VALUE AND TONNAGE OF ALL THE LAKE FLEET ENTERED FOR EACH PORT, WITH TOTALS FOR EACH LAKE AND ST. LAWRENCE RIVER.

PORTS.	Material.	Number.	Gross Tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Total		2,737	920,294	$48,580,174	$53	336
Lake Superior		167	39,653	2,763,500	70	237
Ashland	Wood	1	73	5,000	68	73
Baraga	do	3	1,319	44,000	33	440
Bayfield	do	1	291	6,000	21	291
Duluth	Steel	3	2,684	175,000	65	895
Do	Iron	2	98	20,000	204	49
Do	Composite	1	37	8,000	216	37
Do	Wood	33	1,567	135,300	86	47
Marquette	Steel	4	9,904	900,000	91	2,476
Do	Wood	107	10,855	632,200	58	101
Pequaming	do	4	2,082	124,000	60	521
Republic	do	4	5,314	239,000	45	1,329
Sault Ste. Marie	do	2	477	25,000	52	239
Superior	Steel	2	4,952	450,000	91	2,476
Lakes Huron and St. Clair		726	262,833	13,107,650	50	362
Algonac	Wood	6	2,345	46.000	20	391
Alpena	Steel	1	1,117	100,000	90	1,117
Do	Wood	8	3,867	66,400	17	483
Bay city	Iron	1	306	25,000	82	306
Do	Wood	55	30,870	1,121,100	36	561
Caseville	do	1	298	4,000	13	798
Cheboygan	do	2	83	7,500	90	42
Detroit	Steel	3	5,354	805,000	150	1,785
Do	Iron	7	6,090	706,000	116	870
Do	Composite	7	13,175	1,100,000	83	1,882
Do	Wood	258	105,149	4,936,800	47	408
East China	do	2	1,449	67,000	46	725
East Saginaw	do	30	13,261	419,600	32	442
Marine	do	23	9,875	230,800	23	429
Mount Clemens	do	2	504	1,500	3	252
New Baltimore	do	2	147	11,000	75	74
Oscoda	do	3	1,289	17,000	13	430
Port Huron	Iron	1	161	12,000	75	161
Do	Composite	1	58	15,000	259	58
Do	Wood	291	61,263	3,226,950	53	211
Saginaw	do	10	2,829	88,500	31	283
St. Clair	do	12	3,343	100,500	30	279
Lake Michigan		1,003	196,216	9,114,400	46	196
Benton Harbor	Wood	3	699	39,500	57	233
Charlevoix	do	6	488	12,800	26	81
Chicago	Steel	2	3,481	335,000	96	1,741
Do	Iron	2	365	30,000	82	183
Do	Wood	335	67,414	2,723,350	40	201
Escanaba	do	5	1,615	52,000	32	323
Fort Howard	do	2	222	5,500	25	111
Frankfort	do	1	7	1,000	143	7
Grand Haven	Steel	1	45	7,000	156	45
Do	Iron	5	2,534	321,000	127	507
Do	Wood	219	19,729	1,280,650	65	90
Green Bay	do	10	3,300	115,000	35	330
Holland	do	2	220	3,000	14	110
Kenosha	do	19	7,378	358,900	49	388
Kewaunee	do	1	160	3,000	19	160
Ludington	do	4	752	12,000	16	188
Manistee	do	11	2,732	54,000	20	248
Manitowoc	do	15	1,775	34,600	19	118
Menominee	do	1	277	2,500	9	277
Milwaukee	Iron	3	1,070	82,000	77	357
Do	Wood	256	60,624	3,123,000	52	237
Montague	do	2	217	4,000	18	109
Muskegon	do	17	3,088	63,100	20	182
Northport	do	1	63	7,000	111	63
Onekama	do	1	146	3,500	24	146
Pentwater	do	2	260	4,500	17	130
Peshtigo	do	3	1,704	52,500	31	568
Petoskey	do	1	123	12,000	98	123
Racine	do	26	6,932	145,400	21	267
St. James	do	1	81	1,500	19	81
St. Joseph	do	2	164	1,000	6	82
Saugatuck	do	3	647	33,500	52	216
Sheboygan	do	25	4,115	79,900	19	165
South Haven	do	4	374	5,100	14	94

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 5.—CONSTRUCTION BY LOCALITIES—Continued.

PORTS.	Material.	Number.	Gross tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Lake Michigan—Continued.						
Spring Lake	Wood	2	345	$8, 000	$23	172
Sturgeon Bay	do	2	550	5, 000	9	275
Suttons Bay	do	1	232	3, 000	13	232
Traverse	do	1	336	20, 000	60	336
Troy	do	1	301	7, 000	23	301
Waukegan	do	2	1, 296	58, 000	45	648
Waukesha	do	1	48	600	13	48
Whitehall	do	2	307	4, 000	13	154
Lake Erie		667	392, 903	22, 163, 824	56	589
Ashtabula	Wood	4	175	27, 000	154	44
Avon	do	1	264	5, 000	19	264
Buffalo	Steel	14	29, 853	2, 950, 000	99	2, 132
Do	Iron	12	8, 779	753, 224	86	732
Do	Composite	1	1, 399	90, 000	64	1, 399
Do	Wood	177	88, 829	4, 441, 900	50	502
Cleveland	Steel	8	13, 839	1, 252 000	90	1, 730
Do	Iron	3	6, 147	515, 000	84	2, 049
Do	Wood	208	143, 241	7, 035, 800	49	689
Dunkirk	do	3	522	29, 000	56	174
Erie	Steel	1	2, 500	225, 000	90	2, 500
Do	Iron	7	9, 886	711, 000	72	1, 412
Do	Wood	29	17, 068	823, 900	48	589
Fairport	do	5	316	17, 000	54	63
Fremont	do	2	20	1, 800	90	10
Gratwick	do	1	538	28, 000	52	538
Huron	do	12	5, 091	274, 700	54	424
Lorain	Steel	1	1, 759	150, 000	85	1, 759
Do	Wood	17	6, 862	171, 500	25	404
Milan	do	6	6, 824	323, 500	47	1, 137
Norwalk	do	2	1, 344	51, 000	38	672
Port Clinton	do	1	56	5. 000	89	56
Put in Bay	do	1	168	6, 000	36	168
Suspension Bridge	do	3	346	19, 000	55	115
Sandusky	do	64	18, 303	865, 200	47	286
Toledo	Iron	1	173	17, 000	98	173
Do	Wood	58	17, 854	890, 300	50	308
Tonawanda	do	19	5, 696	287, 000	50	300
Vermilion	do	6	5, 051	198, 000	39	842
Lake Ontario		131	15, 859	676, 300	43	121
Cape Vincent	Wood	52	2, 220	126, 500	57	43
Charlotte						
Chaumont	Wood	1	309	6, 000	19	309
Hamlin	do	1	175	3, 000	17	175
Henderson	do	1	246	4, 000	16	246
Medina	do	1	9	2, 000	222	9
Oswego	do	42	8, 842	402, 000	45	211
Pultneyville	do	1	80	1. 500	19	80
Rochester	Composite	1	87	15, 000	172	87
Do	Wood	20	2, 189	75, 900	35	109
Sacketts Harbor	do	5	521	7, 700	15	104
Sodus Point	do	2	296	8, 000	27	148
Troy	do	1	555	18, 000	32	555
Wilson	do	2	280	5, 000	18	140
Youngstown	do	1	50	1, 700	34	50
St. Lawrence river		43	12, 830	754, 500	59	298
Alexandria Bay	Wood	3	37	5, 000	135	12
Clayton	Iron	1	313	33, 000	105	313
Do	Wood	6	1, 015	36, 500	36	169
Ogdensburg	do	33	11, 465	680, 000	59	347

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 6.—CONSTRUCTION BY MATERIALS—MATERIAL, NUMBER, TONNAGE, VALUE, AND AVERAGES OF VALUE AND TONNAGE OF ALL THE LAKE FLEET ENTERED BY EACH PORT, BUT GROUPED TO SHOW THE TOTALS FOR EACH MATERIAL OF CONSTRUCTION.

STEEL.

PORTS.	Number.	Tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Total	40	75,488	$7,349,000	$97	1,887
Lake Superior	9	17,540	1,525,000	87	1,949
Duluth	3	2,684	175,000	65	895
Marquette	4	9,904	900,000	91	2,476
Superior	2	4,952	450,000	91	2,476
Lakes Huron and St. Clair	4	6,471	905,000	140	1,618
Alpena	1	1,117	100,000	90	1,117
Detroit	3	5,354	805,000	150	1,785
Lake Michigan	3	3,526	342,000	97	1,175
Chicago	2	3,481	335,000	96	1,741
Grand Haven	1	45	7,000	156	45
Lake Erie	24	47,951	4,577,000	95	1,998
Buffalo	14	29,853	2,950,000	99	2,132
Cleveland	8	13,839	1,252,000	90	1,730
Erie	1	2,500	225,000	90	2,500
Lorain	1	1,759	150,000	85	1,759

IRON.

PORTS.	Number.	Tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Total	45	35,922	3,225,224	90	798
Lake Superior	2	98	20,000	204	49
Duluth	2	98	20,000	204	49
Lakes Huron and St. Clair	9	6,557	743,000	113	729
Bay city	1	306	25,000	82	306
Detroit	7	6,090	706,000	116	870
Port Huron	1	161	12,000	75	161
Lake Michigan	10	3,969	433,000	109	397
Chicago	2	365	30,000	82	183
Grand Haven	5	2,534	321,000	127	507
Milwaukee	3	1,070	82,000	77	357
Lake Erie	23	24,985	1,996,224	80	1,086
Buffalo	12	8,779	753,224	86	732
Cleveland	3	6,147	515,000	84	2,049
Erie	7	9,886	711,000	72	1,412
Toledo	1	173	17,000	98	173
St. Lawrence river	1	313	33,000	105	313
Clayton	1	313	33,000	105	313

COMPOSITE.

PORTS.	Number.	Tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Total	11	14,756	1,228,000	83	1,341
Lake Superior	1	37	8,000	216	37
Duluth	1	37	8,000	216	37
Lakes Huron and St. Clair	8	13,233	1,115,000	84	1,654
Detroit	7	13,175	1,100,000	83	1,882
Port Huron	1	58	15,000	259	58
Lake Erie	1	1,399	90,000	64	1,399
Buffalo	1	1,399	90,000	64	1,399
Lake Ontario	1	87	15,000	172	87
Rochester	1	87	15,000	172	87

WOOD.

PORTS.	Number.	Tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Total	2,641	794,128	$36,777,950	$46	301
Lake Superior	155	21,978	1,210,500	55	142
Ashland	1	73	5,000	68	73
Baraga	3	1,319	44,000	33	440
Bayfield	1	291	6,000	21	291
Duluth	33	1,567	135,300	86	47
Marquette	107	10,855	632,200	58	101
Pequaming	4	2,082	124,000	60	521
Republic	4	5,314	239,000	45	1,329
Sault Ste. Marie	2	477	25,000	52	239
Lakes Huron and St. Clair	705	236,572	10,344,650	44	336
Algonac	6	2,345	46,000	20	391
Alpena	8	3,867	66,400	17	483
Bay city	55	30,870	1,121,100	36	561
Caseville	1	298	4,000	13	298
Cheboygan	2	83	7,500	90	42
Detroit	258	105,149	4,936,800	47	408
East China	2	1,449	67,000	46	725
East Saginaw	30	13,261	419,600	32	442
Marine	23	9,875	230,800	23	429
Mount Clemens	2	504	1,500	3	252
New Baltimore	2	147	11,000	75	74
Oscoda	3	1,289	17,000	13	430
Port Huron	291	61,263	3,226,950	53	211
Saginaw	10	2,829	88,500	31	283
St. Clair	12	3,343	100,500	30	279
Lake Michigan	990	188,721	8,339,400	44	190
Benton Harbor	3	699	39,500	57	233
Charlevoix	6	488	12,800	26	81
Chicago	335	67,414	2,723,350	40	201
Escanaba	5	1,615	52,000	32	323
Fort Howard	2	222	5,500	25	111
Frankfort	1	7	1,000	143	7
Grand Haven	219	19,729	1,280,650	65	90
Green Bay	10	3,300	115,000	35	330
Holland	2	220	3,000	14	110
Kenosha	19	7,378	358,900	49	388
Kewaunee	1	160	3,000	19	160
Ludington	4	752	12,000	16	188
Manistee	11	2,732	54,000	20	248
Manitowoc	15	1,775	34,600	19	118
Menominee	1	277	2,500	9	277
Milwaukee	256	60,624	3,123,000	52	237
Montague	2	217	4,000	18	109
Muskegon	17	3,088	63,100	20	182
Northport	1	63	7,000	111	63
Onekama	1	146	3,500	24	146
Pentwater	2	260	4,500	17	130
Peshtigo	3	1,704	52,500	31	568
Petoskey	1	123	12,000	98	123
Racine	26	6,932	145,400	21	267
St. James	1	81	1,500	19	81
St. Joseph	2	164	1,000	6	82
Saugatuck	3	647	33,500	52	216
Sheboygan	25	4,115	79,900	19	165
South Haven	4	374	5,100	14	94
Spring Lake	2	345	8,000	23	172
Sturgeon Bay	2	550	5,000	9	275
Suttons Bay	1	232	3,000	13	232
Traverse	1	336	20,000	60	336
Troy	1	301	7,000	23	301
Waukegan	2	1,296	58,000	45	648
Waukesha	1	48	600	13	48
Whitehall	2	307	4,000	13	154
Lake Erie and Niagara river	619	318,568	15,500,600	49	515
Ashtabula	4	175	27,000	154	44
Avon	1	264	5,000	19	264
Buffalo	177	88,829	4,441,900	50	502
Cleveland	208	143,241	7,035,800	49	689
Dunkirk	3	522	29,000	56	174
Erie	29	17,068	823,900	48	589
Fairport	5	316	17,000	54	63
Fremont	2	20	1,800	90	10
Gratwick	1	538	28,000	52	538
Huron	12	5,091	274,700	54	424
Lorain	17	6,862	171,500	25	404
Milan	6	6,824	323,500	47	1,137
Norwalk	2	1,344	51,000	38	672

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 6.—CONSTRUCTION BY MATERIALS—Continued.

WOOD—Continued.

PORTS.	Number.	Tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Lake Erie and Niagara river—Continued.					
Port Clinton	1	56	$5,000	$89	56
Put in Bay	1	168	6,000	36	168
Suspension Bridge	3	346	19,000	55	115
Sandusky	64	18,303	865,200	47	286
Toledo	58	17,854	890,300	50	308
Tonawanda	19	5,696	287,000	50	300
Vermilion	6	5,051	198,000	39	842
Lake Ontario	130	15,772	661,300	42	121
Cape Vincent	52	2,220	126,500	57	43
Charlotte	....	....	....	....	....
Chaumont	1	309	6,000	19	309
Hamlin	1	175	3,000	17	175
Henderson	1	246	4,000	16	246
Medina	1	9	2,000	222	9
Oswego	42	8,842	402,000	45	211
Pultneyville	1	80	1,500	19	80
Rochester	20	2,189	75,900	35	109
Sacketts Harbor	5	521	7,700	15	104

WOOD—Continued.

PORTS.	Number.	Tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Lake Ontario—Continued.					
Sodus Point	2	296	$8,000	$27	148
Troy	1	555	18,000	32	555
Wilson	2	280	5,000	18	140
Youngstown	1	50	1,700	34	50
St. Lawrence river	42	12,517	721,500	58	298
Alexandria Bay	3	37	5,000	135	12
Clayton	6	1,015	36,500	36	169
Ogdensburg	33	11,465	680,000	59	347

RECAPITULATION—ALL MATERIALS.

PORTS.	Number.	Tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Total	2,737	920,294	48,580,174	53	336
Steel	40	75,488	7,349,000	97	1,887
Iron	45	35,922	3,225,224	90	798
Composite	11	14,756	1,228,000	83	1,341
Wood	2,641	794,128	36,777,950	46	301

TRAFFIC OPERATIONS.

TABLE 7.—FREIGHT MOVEMENT IN GENERAL—RECEIPTS, SHIPMENTS, AND TOTAL MOVEMENT OF FREIGHT BY LAKE AND RIVER TOTALS, CLASSED BY PRINCIPAL PRODUCTS, TOGETHER WITH CERTAIN PERCENTAGES OF TRAFFIC APPLIED TO LOCALITIES AND COMMODITIES.

SUMMARY FOR ALL LAKES AND ST. LAWRENCE RIVER.

COMMODITIES.	TOTAL MOVEMENT.			RECEIPTS.			SHIPMENTS.			EXCESS OF RECEIPTS OVER SHIPMENTS.				EXCESS OF SHIPMENTS OVER RECEIPTS.		
	Amount in tons.	Per cent of total traffic.	Per cent of total commodity.	Amount in tons.	Per cent of total traffic.	Per cent of total commodity.	Amount in tons.	Per cent of total traffic.	Per cent of total commodity.	Amount in tons.	Per cent of commodity.	Per cent of class.	Per cent of aggregate.	Amount in tons.	Per cent of commodity.	Per cent of class.
Total	51, 203, 106	100. 00	100	25, 936, 132	100. 00	100	25, 266, 974	100. 00	100	669, 158			2. 58			
Class I.—Products of agriculture.	8, 449, 806	16. 50	100	4, 041, 738	15. 58	100	4, 408, 068	17. 45	100					366, 330		8. 31
Wheat	1, 888, 312	3. 69	100	919, 162	3. 54	100	969, 150	3. 84	100					49, 988	5. 16	
Corn	3, 513, 515	6. 86	100	1, 583, 901	6. 11	100	1, 929, 614	7. 64	100					345, 713	17. 92	
Other grains	980, 514	1. 92	100	477, 397	1. 84	100	503, 117	1. 99	100					25, 720	5. 11	
Mill products	1, 886, 189	3. 68	100	992, 066	3. 82	100	894, 123	3. 54	100	97, 943	9. 87					
All other farm products.	181, 276	0. 35	100	69, 212	0. 27	100	112, 064	0. 44	100					42, 852	38. 24	
Class II.—Products of mines and quarries.	27 763, 17[illegible]	54. 22	100	13, 454, 189	51. 88	100	14, 308, 989	56. 63	100					854, 800		5. 97
Coal and coke	11, 268, 270	22. 00	100	5, 162, 471	19. 91	100	6, 105, 799	24. 17	100					943, 328	15. 45	
Iron ore	15, 303, 180	29. 89	100	7, 626, 073	29. 40	100	7, 677, 107	30. 38	100					51, 034	0. 66	
Stone (all kinds)	547, 229	1. 07	100	311, 015	1. 20	100	236, 214	0. 93	100	74, 801	24. 05					
Salt	549, 350	1. 07	100	296, 513	1. 14	100	252, 837	1. 00	100	43, 676	14. 72					
Other products of mines and quarries.	95, 149	0. 19	100	58, 117	0. 23	100	37, 032	0. 15	100	21, 085	36. 28					
Class III.—Other products.	12, 331, 236	24. 09	100	6, 921, 985	26. 69	100	5, 409, 251	21. 41	100	1, 512, 734		21. 85				
Animal products	125, 581	0. 25	100	64, 728	0. 25	100	60, 853	0. 24	100	3, 875	5. 99					
Lumber	12, 205, 655	23. 84	100	6, 857, 257	26. 44	100	5, 348, 398	21. 17	100	1, 508, 859	22. 00					
Class IV.—Manufactures, miscellaneous merchandise, and other commodities.	2, 658, 886	5. 19	100	1, 518, 220	5. 85	100	1, 140, 666	4. 51	100	377, 554	24. 87					

LAKE SUPERIOR.

COMMODITIES.	TOTAL MOVEMENT.			RECEIPTS.			SHIPMENTS.		
	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.
Total	7, 925, 930	100. 00	15. 48	2, 491, 149	100. 00	9. 60	5, 434, 781	100. 00	21. 51
Class I.—Products of agriculture	663, 930	8. 38	7. 86	1, 886	0. 08	0. 05	662, 044	12. 18	15. 02
Wheat	399, 355	5. 04	21. 15				399, 355	7. 35	41. 21
Corn	55, 134	0. 70	1. 57	22			55, 112	1. 01	2. 86
Other grains	1, 846	0. 02	0. 19	464	0. 02	0. 10	1, 382	0. 02	0. 27
Mill products	205, 720	2. 60	10. 91	493	0. 02	0. 05	205, 227	3. 78	22. 95
All other farm products	1, 875	0. 02	1. 03	907	0. 04	1. 31	968	0. 02	0. 86
Class II.—Products of mines and quarries	6, 072, 985	76. 62	21. 87	1, 855, 072	74. 47	13. 79	4, 217, 913	77. 61	29. 48
Coal and coke	1, 780, 750	22. 47	15. 80	1. 754, 675	70. 44	33. 99	26, 075	0. 48	0. 43
Iron ore	4, 151, 748	52. 38	27. 13	10, 691	0. 43	0. 14	4, 141, 057	76. 20	53. 94
Stone (all kinds)	87, 276	1. 10	15. 95	69, 587	2. 79	22. 37	17, 689	0. 32	7. 49
Salt	20, 142	0. 25	3. 67	20, 119	0. 81	6. 78	23		0. 01
Other products of mines and quarries	33, 069	0. 42	34. 76				33, 069	0. 61	89. 30
Class III.—Other products	477, 981	6. 03	3. 88	8. 281	0. 33	0. 12	469, 700	8. 64	8. 68
Animal products	1, 914	0. 02	1. 52	371	0. 01	0. 57	1, 543	0. 03	2. 53
Lumber	476, 067	6. 01	3. 90	7. 910	0. 32	0. 12	468, 157	8. 61	8. 75
Class IV.—Manufactures, miscellaneous merchandise, and other commodities.	711, 034	8. 97	26. 74	625, 910	25. 12	41. 23	85, 124	1. 57	7. 46

TRAFFIC OPERATIONS—Continued.

TABLE 7.—FREIGHT MOVEMENT IN GENERAL—Continued.

LAKES HURON AND ST. CLAIR.

COMMODITIES.	TOTAL MOVEMENT.			RECEIPTS.			SHIPMENTS.		
	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.
Total	3, 373, 807	100. 00	6. 59	1. 029, 356	100. 00	3. 97	2, 344, 451	100. 00	9. 27
Class I.—Products of agriculture	195, 619	5. 80	2. 31	68, 553	6. 66	1. 69	127, 066	5. 42	2. 88
Wheat	110, 663	3. 28	5. 86	29, 246	2. 84	3. 18	81, 417	3. 47	8. 40
Corn	38, 448	1. 14	1. 09	10, 688	1. 04	0. 68	27, 760	1. 18	1. 44
Other grains	22, 479	0. 67	2. 29	16, 275	1. 58	3. 41	6, 204	0. 27	1. 23
Mill products	16, 792	0. 50	0. 89	11, 963	1. 16	1. 21	4, 829	0. 21	0. 54
All other farm products	7, 237	0. 21	3. 99	381	0. 04	0. 55	6, 856	0. 29	6. 12
Class II.—Products of mines and quarries	665, 583	19. 73	2. 40	532, 175	51. 70	3. 95	133, 408	5. 69	0. 93
Coal and coke	376, 321	11. 15	3. 34	362, 747	35. 24	7. 03	13, 574	0. 58	0. 22
Iron ore	180, 090	5. 34	1. 18	117, 639	11. 43	1. 54	62, 451	2. 66	0. 81
Stone (all kinds)	25, 975	0. 77	4. 75	25, 975	2. 52	8. 35	....	....	....
Salt	78, 523	2. 33	14. 30	25, 043	2. 43	8. 45	53. 480	2. 28	21. 15
Other products of mines and quarries	4, 674	0. 14	4. 91	771	0. 08	1. 33	3, 903	0. 17	10. 54
Class III.—Other products	2, 426, 660	71. 92	19. 68	390, 434	37. 93	5. 69	2, 036, 226	86. 85	37. 65
Animal products	175	....	0. 14	....	....	....	175	....	0. 29
Lumber	2, 426, 485	71. 92	19. 88	390, 434	37. 93	5. 69	2, 036, 051	86. 85	38. 07
Class IV.—Manufactures, miscellaneous merchandise, and other commodities.	85, 945	2. 55	3. 23	38, 194	3. 71	2. 52	47, 751	2. 04	4. 19

LAKE MICHIGAN.

COMMODITIES.	TOTAL MOVEMENT.			RECEIPTS.			SHIPMENTS.		
	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.
Total	18, 571, 258	100. 00	36. 27	8, 480, 892	100. 00	32. 70	10, 090, 366	100. 00	39. 94
Class I.—Products of agriculture	3, 480, 217	18. 74	41. 19	152, 793	1. 79	3. 78	3, 327, 424	32. 98	75. 48
Wheat	352, 019	1. 89	18. 64	4, 553	0. 05	0. 50	347, 466	3. 44	35. 85
Corn	1, 778, 318	9. 58	50. 61	6, 209	0. 07	0. 39	1, 772, 109	17. 56	91. 84
Other grains	500, 596	2. 70	51. 05	10, 625	0. 12	2. 22	489, 971	4. 86	97. 39
Mill products	738, 833	3. 98	39. 17	118, 423	1. 40	11. 94	620, 410	6. 15	69. 39
All other farm products	110, 451	0. 59	60. 93	12, 983	0. 15	18. 76	97, 468	0. 97	86. 98
Class II.—Products of mines and quarries	7, 784, 066	41. 91	28. 04	4, 151, 379	48. 95	30. 85	3, 632, 687	35. 99	25. 39
Coal and coke	2, 865, 278	15. 43	25. 43	2, 865, 021	33. 78	55. 50	257	....	....
Iron ore	4, 451, 577	23. 97	29. 09	1, 004, 630	11. 85	13. 17	3, 446, 947	34. 16	44. 90
Stone (all kinds)	63, 410	0. 34	11. 59	51, 944	0. 61	16. 70	11, 466	0. 11	4. 86
Salt	399, 539	2. 15	72. 73	225, 582	2. 66	76. 08	173, 957	1. 72	68. 80
Other products of mines and quarries	4, 262	0. 02	4. 48	4, 202	0. 05	7. 23	60	....	0. 16
Class III.—Other products	6, 447, 442	34. 72	52. 28	3, 552, 071	41. 89	51. 32	2, 895, 371	28. 70	53. 53
Animal products	62, 283	0. 34	49. 60	3, 148	0. 04	4. 86	59, 135	0. 59	97. 18
Lumber	6, 385 159	34. 38	52. 31	3, 548, 923	41. 85	51. 75	2, 836, 236	28. 11	53. 03
Class IV.—Manufactures, miscellaneous merchandise, and other commodities.	859, 533	4. 63	32. 33	624, 649	7. 37	41. 14	234, 884	2. 33	20. 59

TRAFFIC OPERATIONS—Continued.

TABLE 7.—FREIGHT MOVEMENT IN GENERAL—Continued.

LAKE ERIE.

COMMODITIES.	TOTAL MOVEMENT.			RECEIPTS.			SHIPMENTS.		
	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.
Total	19,343,875	100.00	37.78	12,957,483	100.00	49.96	6,386,392	100.00	25.28
Class I.—Products of agriculture	3,735,845	19.31	44.21	3,450,723	26.63	85.38	285,122	4.46	6.47
Wheat	978,733	5.06	51.83	837,821	6.47	91.15	140,912	2.20	14.54
Corn	1,493,145	7.72	42.50	1,418,617	10.95	89.56	74,528	1.17	3.86
Other grains	336,684	1.74	34.34	331,124	2.55	69.36	5,560	0.09	1.11
Mill products	878,067	4.54	46.55	814,410	6.28	82.09	63,657	1.00	7.12
All other farm products	49,216	0.25	27.15	48,751	0.38	70.44	465	....	0.41
Class II.—Products of mines and quarries	12,276,929	63.47	44.22	6,826,175	52.68	50.74	5,450,754	85.35	38.09
Coal and coke	5,294,047	27.37	46.98	97,865	0.75	1.89	5,196,182	81.36	85.11
Iron ore	6,517,162	33.69	42.58	6,490,518	50.09	85.11	26,644	0.42	0.35
Stone (all kinds)	364,380	1.89	66.58	161,779	1.25	52.02	202,601	3.17	85.77
Salt	50,988	0.26	9.28	25,661	0.20	8.65	25,327	0.40	10.02
Other products of mines and quarries	50,352	0.26	52.92	50,352	0.39	86.64	....	....	....
Class III.—Other products	2,510,600	12.98	20.36	2,504,400	19.33	36.18	6,200	0.10	0.12
Animal products	59,820	0.31	47.63	59,820	0.46	92.42	....	....	....
Lumber	2,450,780	12.67	20.08	2,444,580	18.87	35.65	6,200	0.10	0.12
Class IV.—Manufactures, miscellaneous merchandise, and other commodities.	820,501	4.24	30.86	176,185	1.36	11.60	644,316	10.09	56.49

LAKE ONTARIO.

COMMODITIES.	TOTAL MOVEMENT.			RECEIPTS.			SHIPMENTS.		
	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.
Total	1,256,947	100.00	2.45	485,220	100.00	1.87	771,727	100.00	3.05
Class I.—Products of agriculture	131,046	10.43	1.55	130,246	26.84	3.22	800	0.11	0.02
Wheat	20,483	1.63	1.09	20,483	4.22	2.23	....	....	....
Corn	16,439	1.31	0.47	16,438	3.39	1.04	1	....	....
Other grains	89,178	7.10	9.10	89,178	18.38	18.68	....	....	....
Mill products	7	....	....	7	....	....	....	....	....
All other farm products	4,939	0.39	2.73	4,140	0.85	5.98	799	0.11	0.71
Class II.—Products of mines and quarries	773,652	61.55	2.79	9,239	1.91	0.07	764,413	99.05	5.34
Coal and coke	771,573	61.38	6.85	7,218	1.49	0.14	764,355	99.05	12.52
Iron ore	....	....	....	....	....	....	....	....	....
Stone (all kinds)	1,738	0.14	0.32	1,730	0.36	0.56	8	....	....
Salt	129	0.01	0.02	79	0.02	0.03	50	....	0.02
Other products of mines and quarries	212	0.02	0.22	212	0.04	0.36	....	....	....
Class III.—Other products	320,843	25.52	2.60	320,831	66.12	4.63	12	....	....
Animal products	601	0.05	0.48	601	0.12	0.93	....	....	....
Lumber	320,242	25.47	2.62	320,230	66.00	4.67	12	....	....
Class IV.—Manufactures, miscellaneous merchandise, and other commodities.	31,406	2.50	1.18	24,904	5.13	1.64	6,502	0.84	0.57

TRAFFIC OPERATIONS—Continued.

TABLE 7.—FREIGHT MOVEMENT IN GENERAL—Continued.

ST. LAWRENCE RIVER.

COMMODITIES.	TOTAL MOVEMENT.			RECEIPTS.			SHIPMENTS.		
	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.	Amount in tons.	Per cent of total lake traffic.	Per cent of total commodity traffic on the Great Lakes.
Total	731. 289	100. 00	1. 43	492, 032	100. 00	1. 90	239, 257	100. 00	0. 95
Class I.—Products of agriculture	243, 149	33. 25	2. 88	237, 537	48. 28	5. 88	5, 612	2. 34	0. 13
Wheat	27, 059	3. 70	1. 43	27, 059	5. 50	2. 94	....	....	....
Corn	132, 031	18. 05	3. 76	131, 927	26. 81	8. 33	104	0. 04	....
Other grains	29, 731	4. 07	3. 03	29, 731	6. 04	6. 23	....	....	....
Mill products	46, 770	6. 40	2. 48	46, 770	9. 51	4. 71	....	....	....
All other farm products	7, 558	1. 03	4. 17	2, 050	0. 42	2. 96	5. 508	2. 30	4. 92
Class II.—Products of mines and quarries	189, 963	25, 98	0. 68	80, 149	16. 29	0. 60	109, 814	45. 90	0. 77
Coal and coke	180, 301	24. 66	1. 60	74, 945	15. 23	1. 45	105, 356	44. 04	1. 72
Iron ore	2, 603	0. 36	0. 02	2, 595	0. 53	0. 04	8	....	....
Stone (all kinds)	4, 450	0. 61	0. 81	....	....	....	4, 450	1. 86	1. 88
Salt	29	....	....	29	....	0. 01	....	....	....
Other products of mines and quarries	2, 580	0. 35	2. 71	2, 580	0. 53	4. 44	....	....	....
Class III.—Other products	147, 710	20. 20	1. 20	145, 968	29. 66	2. 11	1, 742	0. 73	0. 03
Animal products	788	0. 11	0. 63	788	0. 16	1. 22	....	....	....
Lumber	146, 922	20. 09	1. 21	145, 180	29. 50	2. 12	1. 742	0. 73	0. 03
Class IV.—Manufactures, miscellaneous merchandise, and other commodities.	150, 467	20. 57	5. 66	28, 378	5. 77	1. 87	122. 089	51. 03	10. 70

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—RECEIPTS, SHIPMENTS, AND TOTAL TRAFFIC MOVEMENT, GROUPED ACCORDING TO THE 13 PRINCIPAL PRODUCTS AND ALLOTTED TO THE 31 PRINCIPAL PORTS, TOGETHER WITH CERTAIN PERCENTAGES OF TRAFFIC APPLIED TO COMMODITIES, AND THE TOTAL FREIGHT MOVEMENT.

TOTAL OF ALL PRODUCTS.

PORTS.	TOTAL MOVEMENT.			RECEIPTS.			SHIPMENTS.		
	Amount in tons.	Per cent of total commodity traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total commodity traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total commodity traffic.	Per cent of total port traffic.
Total	51,203,106	100.00	100	25,936,132	100.00	100	25,266,974	100.00	100
Chicago (*a*)	7,984,038	15.59	100	5,069,973	19.55	100	2,914,065	11.53	100
Buffalo	6,730,137	13.14	100	4,046,144	15.60	100	2,683,993	10.62	100
Escanaba	3,626,390	7.08	100	195,558	0.75	100	3,430,832	13.58	100
Cleveland	3,621,570	7.07	100	2,737,708	10.56	100	883,862	3.50	100
Ashtabula	2,695,180	5.26	100	2,205,595	8.50	100	489,585	1.94	100
Ashland	2,247,242	4.39	100	487,358	1.88	100	1,759,884	6.97	100
Milwaukee	1,935,808	3.78	100	1,584,254	6.11	100	351,554	1.39	100
Marquette	1,710,885	3.34	100	143,346	0.55	100	1,567,539	6.20	100
Toledo	1,436,991	2.81	100	506,351	1.95	100	930,640	3.68	100
Erie	1,271,988	2.48	100	773,030	2.98	100	498,958	1.97	100
Superior	1,180,297	2.31	100	875,692	3.38	100	304,605	1.21	100
Duluth	1,114,048	2.18	100	683,162	2.63	100	430,886	1.71	100
Tonawanda	1,046,895	2.04	100	1,046,895	4.04	100			
Muskegon	1,002,743	1.96	100	151,303	0.58	100	851,440	3.37	100
Fairport	998,459	1.95	100	939,021	3.62	100	59,438	0.24	100
Two Harbors	936,541	1.83	100				936,541	3.71	100
Detroit	764,553	1.49	100	615,750	2.37	100	148,803	0.59	100
Oswego	691,118	1.35	100	402,847	1.55	100	288,271	1.14	100
Ogdensburg	662,904	1.30	100	470,044	1.81	100	192,860	0.76	100
Manistee	629,910	1.23	100	28,096	0.11	100	601,814	2.38	100
Ludington	627,627	1.23	100	276,229	1.06	100	351,398	1.39	100
Lorain	620,773	1.21	100	346,899	1.34	100	273,874	1.08	100
Sandusky	602,403	1.18	100	305,029	1.18	100	297,374	1.18	100
Bay city	553,219	1.08	100	66,246	0.26	100	486,973	1.93	100
Oscoda	490,413	0.96	100				490,413	1.94	100
Alpena	386,868	0.76	100	11,969	0.05	100	374,899	1.48	100
Charlotte	368,361	0.72	100	18,318	0.07	100	350,043	1.39	100
Marinette	346,246	0.68	100	4,244	0.02	100	342,002	1.35	100
Gladstone	287,590	0.56	100	132,356	0.51	100	155,234	0.61	100
Houghton	286,191	0.56	100	208,047	0.80	100	78,144	0.31	100
Menominee	272,529	0.53	100	7,426	0.03	100	265,103	1.05	100
All other ports	4,073,189	7.95	100	1,597,242	6.16	100	2,475,947	9.80	100

a Including South Chicago.

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—Continued.

A.—PRODUCTS OF AGRICULTURE.

PORTS.	AGGREGATE.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total product of agriculture traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total product of agriculture traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total product of agriculture traffic.	Per cent of total port traffic.
Total	8,449,806	100.00	16.50	4,041,738	100.00	15.58	4,408,068	100.00	17.45
Chicago (*a*)	2,829,895	33.49	35.45	10,854	0.27	0.21	2,819,041	63.95	96.74
Buffalo	3,132,433	37.07	46.54	3,132,433	77.50	77.42			
Escanaba	4,543	0.05	0.13	35		0.02	4,508	0.10	0.13
Cleveland	25,440	0.30	0.70	24,649	0.61	0.90	791	0.02	0.09
Ashtabula									
Ashland									
Milwaukee	348,782	4.13	18.02	120		0.01	348,662	7.91	99.18
Marquette	8			8					
Toledo	275,532	3.26	19.17				275,532	6.25	29.61
Erie	293,641	3.48	23.08	293,641	7.27	37.99			
Superior	292,410	3.46	24.77				292,410	6.64	96.00
Duluth	362,889	4.30	32.57				362,889	8.23	84.22
Tonawanda									
Muskegon	5,327	0.06	0.53	5,327	0.13	3.52			
Fairport									
Two Harbors									
Detroit	121,832	1.44	15.94	7,148	0.18	1.16	114,684	2.60	77.07
Oswego	116,068	1.37	16.79	116,068	2.87	28.81			
Ogdensburg	242,456	2.87	36.57	237,332	5.87	50.49	5.124	0.12	2.66
Manistee	6,208	0.07	0.98	6,196	0.15	22.05	12		
Ludington	61,288	0.73	9.76	61,288	1.52	22.19			
Lorain									
Sandusky	8,063	0.10	1.34				8,063	0.18	2.71
Bay city									
Oscoda	94		0.02				94		0.02
Alpena	5,144	0.06	1.33	5,144	0.13	42.98			
Charlotte	5,406	0.06	1.47	5,406	0.14	29.51			
Marinette	16			16		0.38			
Gladstone	72,354	0.86	25.16				72,354	1.64	46.61
Houghton									
Menominee	80		0.03	80		1.08			
All other ports	239,897	2.84	5.89	135,993	3.36	8.51	103,904	2.36	4.20

PORTS.	WHEAT.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total wheat traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total wheat traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total wheat traffic.	Per cent of total port traffic.
Total	1,888,312	100.00	3.69	919,162	100.00	3.54	969,150	100.00	3.84
Chicago (*a*)	312,203	16.53	3.91				312,203	32.21	10.71
Buffalo	781,548	41.39	11.61	781,548	85.03	19.32			
Escanaba									
Cleveland	22,494	1.19	0.62	22,494	2.45	0.82			
Ashtabula									
Ashland									
Milwaukee	29,191	1.55	1.51				29,191	3.01	8.30
Marquette									
Toledo	132,363	7.01	9.21				132,363	13.66	14.22
Erie	33,779	1.79	2.65	33,779	3.67	4.37			
Superior	191,623	10.15	16.23				191,623	19.77	62.91
Duluth	207,732	11.00	18.64				207,732	21.44	48.21
Tonawanda									
Muskegon	692	0.04	0.07	692	0.08	0.46			
Fairport									
Two Harbors									
Detroit	82,576	4.37	10.80	1,819	0.20	0.30	80,757	8.33	54.27
Oswego	19,297	1.02	2.79	19,297	2.10	4.79			
Ogdensburg	27,058	1.43	4.08	27,058	2.94	5.76			
Manistee									
Ludington									
Lorain									
Sandusky	8,063	0.43	1.34				8,063	0.83	2.71
Bay city									
Oscoda									
Alpena									
Charlotte									
Marinette									
Gladstone	1,500	0.08	0.52				1,500	0.16	0.97
Houghton									
Menominee									
All other ports	38,193	2.02	0.94	32,475	3.53	2.03	5,718	0.59	0.23

a Including South Chicago.

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—Continued.

A.—PRODUCTS OF AGRICULTURE—Continued.

PORTS.	CORN.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total corn traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total corn traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total corn traffic.	Per cent of total port traffic.
Total	3,513,515	100.00	6.86	1,583,901	100.00	6.11	1,929,614	100.00	7.64
Chicago (*a*)	1,769,621	50.37	22.17				1,769,621	91.71	60.73
Buffalo	1,319,560	37.56	19.60	1,319,560	83.31	32.61			
Escanaba									
Cleveland	1,010	0.03	0.03	434	0.03	0.02	576	0.03	0.07
Ashtabula									
Ashland									
Milwaukee	1,434	0.04	0.08				1,434	0.07	0.41
Marquette	[illegible]			8					
Toledo	73,952	2.11	5.14				73,952	3.83	7.95
Erie	98,623	2.81	7.75	98,623	6.23	12.76			
Superior	5,211	0.15	0.44				5,211	0.27	1.72
Duluth	49,901	1.42	4.48				49,901	2.59	11.58
Tonawanda									
Muskegon	2,608	0.07	0.26	2,608	0.16	1.72			
Fairport									
Two Harbors									
Detroit	31,778	0.90	4.16	4,242	0.27	0.69	27,536	1.43	18.51
Oswego	16,434	0.47	2.38	16,434	1.04	4.08			
Ogdensburg	131,907	3.75	19.90	131,907	8.33	28.06			
Manistee	217	0.01	0.03	217	0.01	0.77			
Ludington	163		0.03	163	0.01	0.06			
Lorain									
Sandusky									
Bay city									
Oscoda									
Alpena	168		0.04	168	0.01	1.40			
Charlotte									
Marinette									
Gladstone									
Houghton									
Menominee									
All other ports	10,920	0.31	0.27	9,537	0.60	0.60	1,383	0.07	0.06

PORTS.	OTHER GRAINS.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total other grain traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total other grain traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total other grain traffic.	Per cent of total port traffic.
Total	980,514	100.00	1.92	477,397	100.00	1.84	503,117	100.00	1.99
Chicago (*a*)	457,095	46.62	5.73				457,095	90.85	15.69
Buffalo	316,987	32.33	4.71	316,987	66.40	7.83			
Escanaba									
Cleveland	685	0.07	0.02	685	0.14	0.02			
Ashtabula									
Ashland									
Milwaukee	28,847	2.94	1.49				28,847	5.73	8.21
Marquette									
Toledo	5,560	0.57	0.39				5,560	1.11	0.60
Erie	13,452	1.37	1.06	13,452	2.82	1.74			
Superior									
Duluth	1,304	0.13	0.12				1,304	0.26	0.30
Tonawanda									
Muskegon	1,840	0.19	0.18	1,840	0.39	1.22			
Fairport									
Two Harbors									
Detroit	2,850	0.29	0.37	940	0.20	0.15	1,910	0.38	1.28
Oswego	78,340	7.99	11.33	78,340	16.41	19.45			
Ogdensburg	29,581	3.02	4.46	29,581	6.20	6.29			
Manistee	1,193	0.12	0.19	1,193	0.25	4.25			
Ludington	965	0.10	0.15	965	0.20	0.35			
Lorain									
Sandusky									
Bay city									
Oscoda	64		0.01				64	0.01	0.01
Alpena	4,976	0.51	1.29	4,976	1.04	41.58			
Charlotte	5,406	0.55	1.47	5,406	1.13	29.51			
Marinette	16			16		0.38			
Gladstone									
Houghton									
Menominee									
All other ports	31,353	3.20	0.77	23,016	4.82	1.44	8,337	1.66	0.34

a Including South Chicago.

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—Continued.

A.—PRODUCTS OF AGRICULTURE—Continued.

PORTS.	MILL PRODUCTS.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total mill product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total mill product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total mill product traffic.	Per cent of total port traffic.
Total	1,886,189	100.00	3.68	992,066	100.00	3.82	894,123	100.00	3.54
Chicago (*a*)	229,998	12.19	2.88	1,860	0.19	0.03	228,138	25.52	7.83
Buffalo	666,651	35.35	9.91	666,651	67.20	16.48			
Escanaba	4,543	0.24	0.13	35		0.02	4,508	0.50	0.13
Cleveland	252	0.01		252	0.03	0.01			
Ashtabula									
Ashland									
Milwaukee	289,174	15.33	14.93				289,174	32.34	82.26
Marquette									
Toledo	63,657	3.38	4.43				63,657	7.12	6.84
Erie	147,507	7.82	11.60	147,507	14.87	19.08			
Superior	95,576	5.07	8.10				95,576	10.69	31.37
Duluth	103,134	5.47	9.26				103,134	11.54	23.94
Tonawanda									
Muskegon	33			33		0.02			
Fairport									
Two Harbors									
Detroit	999	0.05	0.13				999	0.11	0.67
Oswego									
Ogdensburg	46,770	2.48	7.05	46,770	4.72	9.95			
Manistee	3,078	0.16	0.49	3,078	0.31	10.95			
Ludington	60,160	3.19	9.58	60,160	6.06	21.78			
Lorain									
Sandusky									
Bay city									
Oscoda									
Alpena									
Charlotte									
Marinette									
Gladstone	70,854	3.76	24.64				70,854	7.92	45.64
Houghton									
Menominee									
All other ports	103,803	5.50	2.55	65,720	6.62	4.11	38,083	4.26	1.54

PORTS.	ALL OTHER FARM PRODUCTS.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total other farm product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total other farm product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total other farm product traffic.	Per cent of total port traffic.
Total	181,276	100.00	0.35	69,212	100.00	0.27	112,064	100.00	0.44
Chicago (*a*)	60,978	33.64	0.76	8,994	13.00	0.18	51,984	46.39	1.78
Buffalo	47,687	26.31	0.71	47,687	68.90	1.18			
Escanaba									
Cleveland	999	0.55	0.03	784	1.13	0.03	215	0.19	0.02
Ashtabula									
Ashland									
Milwaukee	136	0.08	0.01	120	0.17	0.01	16	0.01	
Marquette									
Toledo									
Erie	280	0.15	0.02	280	0.40	0.04			
Superior									
Duluth	818	0.45	0.07				818	0.73	0.19
Tonawanda									
Muskegon	154	0.08	0.02	154	0.22	0.10			
Fairport									
Two Harbors									
Detroit	3,629	2.00	0.48	147	0.21	0.02	3,482	3.11	2.34
Oswego	1,997	1.10	0.29	1,997	2.89	0.49			
Ogdensburg	7,140	3.94	1.08	2,016	2.91	0.43	5,124	4.57	2.66
Manistee	1,720	0.95	0.27	1,708	2.47	6.08	12	0.01	
Ludington									
Lorain									
Sandusky									
Bay city									
Oscoda	30	0.02	0.01				30	0.03	0.01
Alpena									
Charlotte									
Marinette									
Gladstone									
Houghton									
Menominee	80	0.04	0.03	80	0.12	1.08			
All other ports	55,628	30.69	1.36	5,245	7.58	0.33	50,383	44.96	2.03

a Including South Chicago.

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—Continued.

B.—PRODUCTS OF MINES AND QUARRIES.

PORTS.	AGGREGATE.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total mine and quarry traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total mine and quarry traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total mine and quarry traffic.	Per cent of total port traffic.
Total	27,763,178	100.00	54.22	13,454,189	100.00	51.88	14,308,989	100.00	56.63
Chicago (*a*)	2,209,284	7.96	27.67	2,209,276	16.42	43.58	8		
Buffalo	2,568,035	9.25	38.16	386,066	2.87	9.54	2,181,969	15.25	81.30
Escanaba	3,558,620	12.82	98.13	194,521	1.44	99.47	3,364,099	23.51	98.06
Cleveland	2,951,439	10.63	81.50	2,092,187	15.55	76.42	859,252	6.01	97.22
Ashtabula	2,690,944	9.69	99.84	2,201,359	16.36	99.81	489,585	3.42	100.00
Ashland	1,867,712	6.73	83.11	204,691	1.52	42.00	1,663,021	11.62	94.50
Milwaukee	1,107,543	3.99	57.21	1,107,543	8.23	69.91			
Marquette	1,680,091	6.05	98.20	138,596	1.03	96.69	1,541,495	10.77	98.34
Toledo	863,488	3.11	60.09	213,488	1.59	42.16	650,000	4.54	69.84
Erie	835,910	3.01	65.72	425,507	3.16	55.04	410,403	2.87	82.25
Superior	733,506	2.64	62.15	726,537	5.40	82.97	6,969	0.05	2.29
Duluth	538,916	1.94	48.38	538,916	4.00	78.89			
Tonawanda	17,166	0.06	1.64	17,166	0.13	1.64			
Muskegon	15,733	0.06	1.57	15,733	0.12	10.40			
Fairport	990,124	3.57	99.17	930,686	6.92	99.11	59,438	0.41	100.00
Two Harbors	936,541	3.37	100.00				936,541	6.55	100.00
Detroit	287,277	1.03	37.57	280,675	2.09	45.58	6,602	0.05	4.44
Oswego	282,148	1.02	40.83				282,148	1.97	97.88
Ogdensburg	136,754	0.50	20.63	71,398	0.53	15.19	65,356	0.46	33.89
Manistee	114,188	0.41	18.13	9,187	0.07	32.70	105,001	0.73	17.45
Ludington	61,804	0.22	9.85	4,583	0.03	1.66	57,221	0.40	16.28
Lorain	613,704	2.22	98.86	340,033	2.53	98.02	273,671	1.91	99.93
Sandusky	504,188	1.82	83.70	214,877	1.60	70.44	289,311	2.02	97.29
Bay city	67,423	0.24	12.19	62,046	0.46	93.66	5,377	0.04	1.10
Oscoda	322		0.07				322		0.07
Alpena	6,825	0.02	1.76	6,825	0.05	57.02			
Charlotte	350,000	1.26	95.01				350,000	2.45	99.99
Marinette	2,999	0.01	0.87	2,957	0.02	69.67	42		0.01
Gladstone	208,940	0.75	72.65	126,060	0.94	95.24	82,880	0.58	53.39
Houghton	235,187	0.85	82.18	166,523	1.24	80.04	68,664	0.48	87.87
Menominee	1,346		0.49	1,346	0.01	18.12			
All other ports	1,325,021	4.77	32.53	765,407	5.69	47.92	559,614	3.91	22.60

PORTS.	COAL AND COKE.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total coal and coke traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total coal and coke traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total coal and coke traffic.	Per cent of total port traffic.
Total	11,268,270	100.00	22.01	5,162,471	100.00	19.91	6,105,799	100.00	24.17
Chicago (*a*)	1,329,364	11.80	16.65	1,329,364	25.75	26.22			
Buffalo	2,156,670	19.14	32.05				2,156,670	35.32	80.36
Escanaba	194,199	1.72	5.36	194,199	3.76	99.30			
Cleveland	826,230	7.33	22.82	1,200	0.02	0.04	825,030	13.52	93.34
Ashtabula	489,585	4.35	18.17				489,585	8.02	100.00
Ashland	201,241	1.79	8.96	201,241	3.90	41.29			
Milwaukee	907,743	8.06	46.89	907,743	17.58	57.30			
Marquette	126,421	1.12	7.39	126,421	2.45	88.19			
Toledo	743,369	6.60	51.73	93,369	1.81	18.44	650,000	10.65	69.84
Erie	410,403	3.64	32.27				410,403	6.72	82.25
Superior	720,000	6.39	61.00	720,000	13.95	82.22			
Duluth	485,000	4.30	43.54	485,000	9.39	70.99			
Tonawanda									
Muskegon	3,620	0.03	0.36	3,620	0.07	2.39			
Fairport	59,438	0.53	5.95				59,438	0.97	100.00
Two Harbors									
Detroit	145,464	1.29	19.02	141,900	2.75	23.04	3,564	0.06	2.40
Oswego	282,098	2.50	40.82				282,098	4.62	97.86
Ogdensburg	131,587	1.17	19.85	66,231	1.28	14.09	65,356	1.07	33.89
Manistee	9,187	0.08	1.46	9,187	0.18	32.70			
Ludington	4,583	0.04	0.73	4,583	0.09	1.66			
Lorain	273,671	2.43	44.08				273,671	4.48	99.93
Sandusky	276,946	2.46	45.98	1,561	0.03	0.51	275,385	4.51	92.60
Bay city	51,000	0.45	9.22	51,000	0.99	76.98			
Oscoda									
Alpena	6,000	0.05	1.55	6,000	0.12	50.13			
Charlotte	350,000	3.11	95.01				350,000	5.73	99.99
Marinette	2,870	0.03	0.83	2,870	0.06	67.62			
Gladstone	122,000	1.08	42.42	122,000	2.36	92.17			
Houghton	169,336	1.50	59.17	144,261	2.79	69.34	25,075	0.41	32.09
Menominee	1,150	0.01	0.42	1,150	0.02	15.48			
All other ports	789,095	7.00	19.37	549,571	10.65	34.41	239,524	3.92	9.67

a Including South Chicago.

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—Continued.

B.—PRODUCTS OF MINES AND QUARRIES—Continued.

IRON ORE.

PORTS.	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total iron ore traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total iron ore traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total iron ore traffic.	Per cent of total port traffic.
Total	15,303,180	100.00	29.89	7,626,073	100.00	29.40	7,677,107	100.00	30.38
Chicago (*a*)	731,188	4.78	9.16	731,188	9.59	14.42			
Buffalo	333,827	2.18	4.96	333,827	4.38	8.25			
Escanaba	3,364,067	21.98	92.77				3,364,067	43.82	98.06
Cleveland	1,978,208	12.93	54.62	1,951,564	25.59	71.28	26,644	0.34	3.02
Ashtabula	2,199,109	14.37	81.59	2,199,109	28.84	99.71			
Ashland	1,663,021	10.87	74.00				1,663,021	21.66	94.50
Milwaukee	124,312	0.81	6.42	124,312	1.63	7.85			
Marquette	1,541,495	10.07	90.10				1,541,495	20.08	98.34
Toledo	97,476	0.64	6.78	97,476	1.28	19.25			
Erie	418,426	2.73	32.89	418,426	5.49	54.12			
Superior									
Duluth	10,691	0.07	0.96	10,691	0.14	1.57			
Tonawanda	17,166	0.11	1.64	17,166	0.22	1.64			
Muskegon									
Fairport	928,616	6.07	93.01	928,616	12.18	98.89			
Two Harbors	936,541	6.12	100.00				936,541	12.20	100.00
Detroit	119,403	0.78	15.62	117,247	1.54	19.04	2,156	0.03	1.45
Oswego									
Ogdensburg	2,587	0.02	0.39	2,587	0.03	0.55			
Manistee									
Ludington									
Lorain	335,162	2.19	54.00	335,162	4.39	96.62			
Sandusky	208,411	1.36	34.60	208,411	2.73	68.33			
Bay city									
Oscoda	28		0.01				28		0.01
Alpena									
Charlotte									
Marinette									
Gladstone	82,880	0.54	28.82				82,880	1.08	53.39
Houghton									
Menominee									
All other ports	210,566	1.38	5.17	150,291	1.97	9.41	60,275	0.79	2.43

STONE (ALL KINDS).

PORTS.	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total stone traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total stone traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total stone traffic.	Per cent of total port traffic.
Total	547,229	100.00	1.07	311,015	100.00	1.20	236,214	100.00	0.93
Chicago (*a*)	18,176	3.32	0.23	18,176	5.85	0.36			
Buffalo	9,060	1.66	0.13	9,060	2.91	0.22			
Escanaba	288	0.05		288	0.09	0.15			
Cleveland	138,327	25.28	3.82	130,777	42.05	4.78	7,550	3.20	0.86
Ashtabula	2,250	0.41	0.08	2,250	0.72	0.10			
Ashland									
Milwaukee	3,262	0.60	0.17	3,262	1.05	0.20			
Marquette	11,951	2.18	0.70	11,951	3.84	8.34			
Toledo	12,822	2.34	0.89	12,822	4.12	2.53			
Erie									
Superior									
Duluth	35,374	6.46	3.17	35,374	11.37	5.18			
Tonawanda									
Muskegon	12,113	2.21	1.21	12,113	3.90	8.01			
Fairport	2,070	0.38	0.21	2,070	0.67	0.22			
Two Harbors									
Detroit									
Oswego									
Ogdensburg									
Manistee									
Ludington									
Loraine	4,800	0.88	0.77	4,800	1.54	1.38			
Sandusky	13,926	2.55	2.31				13,926	5.89	4.69
Bay city	11,000	2.01	1.99	11,000	3.54	16.61			
Oscoda									
Alpena	600	0.11	0.15	600	0.19	5.01			
Charlotte									
Marinette									
Gladstone									
Houghton	39,951	7.30	13.96	22,262	7.16	10.70	17,689	7.49	22.64
Menominee									
All other ports	231,259	42.26	5.68	34,210	11.00	2.14	197,049	83.42	7.96

a Including South Chicago.

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—Continued.

B.—PRODUCTS OF MINES AND QUARRIES—Continued.

PORTS.	SALT.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total salt traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total salt traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total salt traffic.	Per cent of total port traffic.
Total	549, 350	100. 00	1. 07	296, 513	100. 00	1. 14	252, 837	100. 00	1. 00
Chicago (*a*)	128, 956	23. 47	1. 61	128, 948	43. 49	2. 55	8		
Buffalo	25, 299	4. 61	0. 38				25, 299	10. 01	0. 94
Escanaba	66	0. 01		34	0. 01	0. 02	32	0. 01	
Cleveland	8, 674	1. 58	0. 24	8, 646	2. 92	0. 32	28	0. 01	
Ashtabula									
Ashland	3, 450	0. 63	0. 15	3, 450	1. 16	0. 71			
Milwaukee	71, 944	13. 10	3. 72	71, 944	24. 26	4. 54			
Marquette	224	0. 04	0. 01	224	0. 08	0. 16			
Toledo	9, 729	1. 77	0. 68	9, 729	3. 28	1. 92			
Erie									
Superior	6, 537	1. 19	0. 56	6, 537	2. 20	0. 75			
Duluth	7, 851	1. 43	0. 71	7, 851	2. 65	1. 15			
Tonawanda									
Muskegon									
Fairport									
Two Harbors									
Detroit	22, 410	4. 08	2. 93	21, 528	7. 26	3. 50	882	0. 35	0. 59
Oswego	50	0. 01	0. 01				50	0. 02	0. 02
Ogdensburg									
Manistee	105, 001	19. 11	16. 67				105, 001	41. 53	17. 45
Ludington	57, 221	10. 42	9. 12				57, 221	22. 63	16. 28
Lorain	71	0. 01	0. 01	71	0. 02	0. 02			
Sandusky	4, 905	0. 89	0. 81	4, 905	1. 65	1. 60			
Bay city	5, 377	0. 98	0. 97				5, 377	2. 13	1. 10
Oscoda	294	0. 05	0. 06				294	0. 11	0. 06
Alpena									
Charlotte									
Marinette	129	0. 02	0. 04	87	0. 03	2. 05	42	0. 02	0. 01
Gladstone	4, 060	0. 74	1. 41	4, 060	1. 37	3. 07			
Houghton									
Menominee	196	0. 04	0. 07	196	0. 07	2. 64			
All other ports	86, 906	15. 82	2. 13	28, 303	9. 55	1. 77	58, 603	23. 18	2. 37

PORTS.	OTHER PRODUCTS OF MINES AND QUARRIES.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total other product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total other product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total other product traffic.	Per cent of total port traffic.
Total	95, 149	100. 00	0. 18	58, 117	100. 00	0. 23	37, 032	100. 00	0. 15
Chicago (*a*)	1, 600	1. 68	0. 02	1, 600	2. 75	0. 03			
Buffalo	43, 179	45. 38	0. 64	43, 179	74. 30	1. 07			
Escanaba									
Cleveland									
Ashtabula									
Ashland									
Milwaukee	282	0. 30	0. 01	282	0. 48	0. 02			
Marquette									
Toledo	92	0. 10	0. 01	92	0. 16	0. 02			
Erie	7, 081	7. 44	0. 56	7, 081	12. 18	0. 92			
Superior	6, 969	7. 32	0. 59				6, 969	18. 82	2. 29
Duluth									
Tonawanda									
Muskegon									
Fairport									
Two Harbors									
Detroit									
Oswego									
Ogdensburg	2, 580	2. 71	0. 39	2, 580	4. 44	0. 55			
Manistee									
Ludington									
Lorain									
Sandusky									
Bay city	46	0. 05	0. 01	46	0. 08	0. 07			
Oscoda									
Alpena	225	0. 24	0. 06	225	0. 39	1. 88			
Charlotte									
Marinette									
Gladstone									
Houghton	25, 900	27. 22	9. 05				25, 900	69. 94	33. 14
Menominee									
All other ports	7, 195	7. 56	0. 18	3, 032	5. 22	0. 19	4, 163	11. 24	0. 17

a Including South Chicago.

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—Continued.

C.—OTHER PRODUCTS.

PORTS.	AGGREGATE.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total other product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total other product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total other product traffic.	Per cent of total port traffic.
Total	14,990,122	100.00	29.28	8,440,205	100.00	32.54	6,549,917	100.00	25.92
Chicago (*a*)	2,944,859	19.65	36.88	2,849,843	33.77	56.21	95,016	1.45	3.26
Buffalo	1,029,669	6.87	15.30	527,645	6.25	13.04	502,024	7.67	18.70
Escanaba	63,227	0.42	1.74	1,002	0.01	0.51	62,225	0.95	1.81
Cleveland	644,691	4.30	17.80	620,872	7.36	22.68	23,819	0.36	2.69
Ashtabula	4,236	0.03	0.16	4,236	0.05	0.19			
Ashland	379,530	2.53	16.89	282,667	3.35	58.00	96,863	1.48	5.50
Milwaukee	479,483	3.20	24.77	476,591	5.65	30.08	2,892	0.04	0.82
Marquette	30,786	0.20	1.80	4,742	0.06	3.31	26,044	0.40	1.66
Toledo	297,971	1.99	20.74	292,863	3.47	57.84	5,108	0.08	0.55
Erie	142,437	0.95	11.20	53,882	0.64	6.97	88,555	1.35	17.75
Superior	154,381	1.03	13.08	149,155	1.77	17.03	5,226	0.08	1.71
Duluth	212,243	1.42	19.05	144,246	1.71	21.11	67,997	1.04	15.78
Tonawanda	1,029,729	6.87	98.36	1,029,729	12.20	98.36			
Muskegon	981,683	6.55	97.90	130,243	1.54	86.08	851,440	13.00	100.00
Fairport	8,335	0.05	0.83	8,335	0.10	0.89			
Two Harbors									
Detroit	355,444	2.37	46.49	327,927	3.89	53.26	27,517	0.42	18.49
Oswego	292,902	1.95	42.38	286,779	3.40	71.19	6,123	0.09	2.12
Ogdensburg	283,694	1.89	42.80	161,314	1.91	34.32	122,380	1.87	63.45
Manistee	509,514	3.40	80.89	12,713	0.15	45.25	496,801	7.59	82.55
Ludington	504,535	3.37	80.39	210,358	2.49	76.15	294,177	4.49	83.72
Lorain	7,069	0.05	1.14	6,866	0.08	1.98	203		0.07
Sandusky	90,152	0.60	14.96	90,152	1.07	29.56			
Bay city	485,796	3.24	87.81	4,200	0.05	6.34	481,596	7.35	98.90
Oscoda	489,997	3.27	99.91				489,997	7.48	99.91
Alpena	374,899	2.50	96.91				374,899	5.72	100.00
Charlotte	12,955	0.09	3.52	12,912	0.15	70.49	43		0.01
Marinette	343,231	2.29	99.13	1,271	0.01	29.95	341,960	5.22	99.99
Gladstone	6,296	0.04	2.19	6,296	0.07	4.76			
Houghton	51,004	0.34	17.82	41,524	0.49	19.96	9,480	0.15	12.13
Menominee	271,103	1.81	99.48	6,000	0.07	80.80	265,103	4.05	100.00
All other ports	2,508,271	16.73	61.58	695,842	8.24	43.57	1,812,429	27.67	73.20

PORTS.	ANIMAL PRODUCTS.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total animal product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total animal product traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total animal product traffic.	Per cent of total port traffic.
Total	125,581	100.00	0.25	64,728	100.00	0.25	60,853	100.00	0.24
Chicago (*a*)	56,131	44.70	0.70	146	0.22		55,985	92.00	1.92
Buffalo	59,820	47.63	0.89	59,820	92.42	1.48			
Escanaba	34	0.03					34	0.06	
Cleveland									
Ashtabula									
Ashland									
Milwaukee	2,366	1.88	0.12	72	0.11		2,294	3.77	0.65
Marquette									
Toledo									
Erie									
Superior	1,321	1.05	0.11				1,321	2.17	0.43
Duluth									
Tonawanda									
Muskegon	963	0.77	0.10	963	1.49	0.64			
Fairport									
Two Harbors									
Detroit									
Oswego									
Ogdensburg	426	0.34	0.07	426	0.66	0.09			
Manistee	427	0.34	0.07	419	0.65	1.49	8	0.01	
Ludington									
Lorain									
Sandusky									
Bay city									
Oscoda									
Alpena									
Charlotte									
Marinette									
Gladstone									
Houghton									
Menominee									
All other ports	4,093	3.26	0.10	2,882	4.45	0.18	1,211	1.99	0.05

a Including South Chicago.

TRAFFIC OPERATIONS—Continued.

TABLE 8.—FREIGHT MOVEMENT IN GENERAL, BY PRINCIPAL PORTS—Continued.

C.—OTHER PRODUCTS—Continued.

PORTS.	LUMBER.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total lumber traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total lumber traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total lumber traffic.	Per cent of total port traffic.
Total	12, 205, 655	100. 00	23. 84	6, 857, 257	100. 00	26. 44	5, 348, 398	100. 00	21. 17
Chicago (*a*)	2, 590, 110	21. 22	32. 44	2, 588, 004	37. 74	51. 05	2, 106	0. 04	0. 07
Buffalo	403, 951	3. 31	6. 00	403, 951	5. 89	9. 98	.....	.....	.....
Escanaba	54, 041	0. 44	1. 49	.....	.....	.....	54, 041	1. 01	1. 57
Cleveland	566, 718	4. 64	15. 65	565, 626	8. 25	20. 66	1. 092	0. 02	0. 12
Ashtabula	4, 236	0. 03	0. 16	4, 236	0. 06	0. 19	.....	.....	.....
Ashland	80, 119	0. 66	3. 57	.....	.....	.....	80, 119	1. 50	4. 55
Milwaukee	412, 479	3. 38	21. 31	412, 479	6. 02	26. 04	.....	.....	.....
Marquette	16, 179	0. 13	0. 95	175	.....	0. 12	16, 004	0. 30	1. 02
Toledo	287, 507	2. 36	20. 01	282, 399	4. 12	55. 77	5, 108	0. 10	0. 55
Erie	17, 850	0. 15	1. 40	17, 850	0. 26	2. 31	.....	.....	.....
Superior	3, 905	0. 03	0. 33	.....	.....	.....	3, 905	0. 07	1. 28
Duluth	13, 110	0. 11	1. 18	.....	.....	.....	13, 110	0. 25	3. 04
Tonawanda	1, 029, 729	8. 44	98. 36	1, 029, 729	15. 02	98. 36	.....	.....	.....
Muskegon	966, 145	7. 92	96. 35	119, 539	1. 74	79. 00	846, 615	15. 83	99. 43
Fairport	878	0. 01	0. 09	878	0. 01	0. 09	.....	.....	.....
Two Harbors	.....	.....	.....	.....	.....	.....	.....	.....	.....
Detroit	325, 256	2. 66	42. 54	314, 995	4. 59	51. 16	10. 261	0. 19	6. 89
Oswego	283, 058	2. 32	40. 96	283, 058	4. 13	70. 27	.....	.....	.....
Ogdensburg	136, 773	1. 12	20. 63	135, 273	1. 97	28. 78	1, 500	0. 03	0. 78
Manistee	477, 785	3. 91	75. 85	.....	.....	.....	477, 785	8. 93	79. 39
Ludington	258, 520	2. 12	41. 19	.....	.....	.....	258, 520	4. 83	73. 57
Lorain	6, 866	0. 06	1. 11	6, 866	0. 10	1. 98	.....	.....	.....
Sandusky	87, 040	0. 71	14. 45	87, 040	1. 27	28. 54	.....	.....	.....
Bay city	485, 796	3. 98	87. 81	4, 200	0. 06	6. 34	481, 596	9. 00	98. 90
Oscoda	489, 962	4. 01	99. 90	.....	.....	.....	489, 962	9. 16	99. 91
Alpena	373, 204	3. 06	96. 47	.....	.....	.....	373, 204	6. 98	99. 55
Charlotte	12, 912	0. 10	3. 51	12, 912	0. 19	70. 49	.....	.....	.....
Marinette	341, 723	2. 80	98. 70	278	0. 01	6. 55	341, 445	6. 38	99. 84
Gladstone	.....	.....	.....	.....	.....	.....	.....	.....	.....
Houghton	10, 704	0. 09	3. 74	1, 224	0. 02	0. 59	9, 480	0. 18	12. 13
Menominee	265, 103	2. 17	97. 28	.....	.....	.....	265, 103	4. 96	100. 00
All other ports	2, 203, 996	18. 06	54. 11	586, 554	8. 55	36. 73	1, 617, 442	30. 24	65. 32

PORTS.	MANUFACTURES, MISCELLANEOUS MERCHANDISE, AND OTHER COMMODITIES.								
	Total movement.			Receipts.			Shipments.		
	Amount in tons.	Per cent of total manufactures, etc., traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total manufactures, etc., traffic.	Per cent of total port traffic.	Amount in tons.	Per cent of total manufactures, etc., traffic.	Per cent of total port traffic.
Total	2, 658, 886	100. 00	5. 19	1, 518, 220	100. 00	5. 85	1, 140, 666	100. 00	4. 51
Chicago (*a*)	298, 618	11. 23	3. 74	261, 693	17. 24	5. 16	36, 925	3. 24	1. 27
Buffalo	565, 898	21. 28	8. 41	63, 874	4. 21	1. 58	502, 024	44. 01	18. 70
Escanaba	9, 152	0. 34	0. 25	1, 002	0. 06	0. 51	8, 150	0. 71	0. 24
Cleveland	77, 973	2. 93	2. 15	55, 246	3. 64	2. 02	22, 727	1. 99	2. 57
Ashtabula	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ashland	299, 411	11. 26	13. 32	282, 667	18. 62	58. 00	16, 744	1. 47	0. 95
Milwaukee	64, 638	2. 43	3. 34	64, 040	4. 22	4. 04	598	0. 05	0. 17
Marquette	14, 607	0. 55	0. 85	4, 567	0. 30	3. 19	10, 040	0. 88	0. 64
Toledo	10, 464	0. 39	0. 73	10, 464	0. 69	2. 07	.....	.....	.....
Erie	124, 587	4. 69	9. 80	36, 032	2. 37	4. 66	88, 555	7. 76	17. 75
Superior	149, 155	5. 61	12. 64	149, 155	9. 82	17. 03	.....	.....	.....
Duluth	199, 133	7. 49	17. 87	144, 246	9. 50	21. 11	54, 887	4. 81	12. 74
Tonawanda	.....	.....	.....	.....	.....	.....	.....	.....	.....
Muskegon	14, 575	0. 55	1. 45	9, 750	0. 64	6. 44	4, 825	0. 42	0. 57
Fairport	7, 457	0. 28	0. 74	7, 457	0. 49	0. 80	.....	.....	.....
Two Harbors	.....	.....	.....	.....	.....	.....	.....	.....	.....
Detroit	30, 188	1. 14	3. 95	12, 932	0. 85	2. 10	17, 256	1. 51	11. 60
Oswego	9, 844	0. 37	1. 42	3, 721	0. 25	0. 92	6, 123	0. 54	2. 12
Ogdensburg	146, 495	5. 51	22. 10	25, 615	1. 69	5. 45	120, 880	10. 60	62. 67
Manistee	31, 302	1. 18	4. 97	12, 294	0. 81	43. 76	19, 008	1. 67	3. 16
Ludington	246, 015	9. 25	39. 20	210, 358	13. 86	76. 15	35, 657	3. 13	10. 15
Lorain	203	0. 01	0. 03	.....	.....	.....	203	0. 02	0. 07
Sandusky	3, 112	0. 12	0. 51	3, 112	0. 20	1. 02	.....	.....	.....
Bay city	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oscoda	35	.....	0. 01	.....	.....	.....	35	.....	.....
Alpena	1, 695	0. 06	0. 44	.....	.....	.....	1, 695	0. 15	0. 45
Charlotte	43	.....	0. 01	.....	.....	.....	43	.....	0. 01
Marinette	1, 508	0. 06	0. 43	993	0. 07	23. 40	515	0. 05	0 15
Gladstone	6, 296	0. 24	2. 19	6, 296	0. 41	4. 76	.....	.....	.....
Houghton	40, 300	1. 52	14. 08	40, 300	2. 65	19. 37	.....	.....	.....
Menominee	6, 000	0. 22	2. 20	6, 000	0. 40	80. 80	.....	.....	.....
All other ports	300, 182	11. 29	7. 37	106, 406	7. 01	6. 66	193, 776	16. 99	7. 83

a Including South Chicago.

TRAFFIC OPERATIONS—Continued.

Table 9.—FREIGHT MOVEMENT IN GENERAL SUMMARIZED—RECEIPTS, SHIPMENTS AND TOTAL MOVEMENT OF THE LAKE FREIGHT, UNCLASSIFIED AS TO COMMODITIES, AND ALLOTTED TO ALL THE TRADING POINTS OF THE GREAT LAKES AND ST. LAWRENCE RIVER.

PORTS.	Total tonnage.	Receipts.	Shipments.
Total	51, 203, 106	25, 936, 132	25, 266, 974
Chicago (*a*), Illinois	7, 984, 038	5, 069, 973	2, 914, 065
Buffalo, New York	6, 730, 137	4, 046, 144	2, 683, 993
Escanaba, Michigan	3, 626, 390	195, 558	3, 430, 832
Cleveland, Ohio	3, 621, 570	2, 737, 708	883. 862
Ashtabula, Ohio	2, 695, 180	2, 205, 595	489, 585
Ashland, Wisconsin	2. 247, 242	487. 358	1, 759, 884
Milwaukee, Wisconsin	1, 935, 808	1, 584, 254	351, 554
Marquette, Michigan	1, 710, 885	143, 346	1, 567, 539
Toledo, Ohio	1, 436, 991	506, 351	930, 640
Erie, Pennsylvania	1, 271, 988	773, 030	498, 958
Superior, Wisconsin	1, 180, 297	875, 692	304, 605
Duluth, Minnesota	1, 114, 048	683, 162	430, 886
Tonawanda, New York	1, 046. 895	1, 046, 895	
Muskegon, Michigan	1, 002, 743	151, 303	851, 440
Fairport, Ohio	998, 459	939, 021	59, 438
Two Harbors, Minnesota	936, 541		936, 541
Detroit, Michigan	764. 553	615, 750	148, 803
Oswego, New York	691, 118	402. 847	288, 271
Ogdensburg, New York	662, 904	470, 044	192, 860
Manistee, Michigan	629. 910	28, 096	601, 814
Ludington, Michigan	627, 627	276, 229	351, 398
Lorain, Ohio	620, 773	346, 899	273, 874
Sandusky. Ohio	602, 403	305, 029	297, 374
Bay city, Michigan	553, 219	66, 246	486, 973
Oscoda, Michigan	490, 413		490, 413
Alpena, Michigan	386. 868	11, 969	374, 899
Charlotte, New York	368. 361	18, 318	350, 043
Marinette, Wisconsin	346, 246	4, 244	342. 002
Gladstone, Michigan	287, 590	132, 356	155, 234
Houghton, Michigan	286. 191	208, 047	78, 144
Menominee, Michigan	272. 529	7, 426	265, 103
East Saginaw, Michigan	248, 538	48, 686	199, 852
Kelleys Island, Ohio	232, 153	19, 971	212, 182
East Tawas, Michigan	230, 516	1, 172	229, 344
Cheboygan, Michigan	218, 940	24, 523	194, 417
Washburn, Wisconsin	188. 393	55, 092	133, 301
Port Huron, Michigan	170. 073	152, 073	18, 000
Grand Haven, Michigan	169. 546	101, 150	68, 396
Racine, Wisconsin	160, 537	159, 312	1, 225
Green Bay, Wisconsin	156, 810	101, 369	55, 441
Michigan city, Indiana	148. 029	147. 897	132
Manistique, Michigan	144, 011	3. 690	140, 321
Fair Haven. New York	134, 799	15, 482	119. 317
Sheboygan, Wisconsin	124, 387	115. 995	8, 392
Manitowoc, Wisconsin	113, 377	88, 354	25, 023
St. Ignace, Michigan	107, 895	24, 068	83, 827
St. Joseph, Michigan	85, 017	60, 516	24, 501
Ford River, Michigan	82, 080	512	81, 568
Peshtigo, Wisconsin	80, 683		80, 683
Sault Ste. Marie, Michigan	76, 125	37, 063	39, 062
Montague, Michigan	72, 348	1, 264	71, 084
Elk Rapids, Michigan	72, 108	41, 020	31, 088
Huron, Ohio	70, 180	13, 694	56, 486
Charlevoix, Michigan	62, 824	8, 915	53, 909
Marine city, Michigan	61, 001	45, 575	15, 426
Traverse city, Michigan	60, 766	6, 566	54, 200
Baraga, Michigan	59, 278		59, 278
Pequaming, Michigan	54, 193		54, 193
Fruitport, Michigan	54, 126	47, 854	6, 272
Morristown, New York	48, 369	7, 178	41, 191
St. Clair, Michigan	41, 553	14, 030	27, 523
Kenosha, Wisconsin	41, 532	35, 808	5, 724
Ontonagon, Michigan	40, 700		40, 700
Benton Harbor, Michigan	37, 573	34, 614	2, 959
Fayette, Michigan	37, 389	23, 557	13, 832
Pentwater. Michigan	33, 111	469	32, 642
Kewaunee, Wisconsin	32, 627	9, 273	23, 354
Port Washington, Wisconsin	32, 304	21, 197	11, 107
Bay Mills, Michigan	32, 037	1, 389	30, 648
Sodus Point, New York	24, 846	11, 911	12, 935
Cape Vincent, New York	22, 819	22, 398	421
Rogers city, Michigan	22, 504	491	22, 013
Black River, Michigan	22, 293	2, 043	20, 250
Algonac, Michigan	17, 586	9, 654	7, 932
Dunkirk. New York	17, 146	17, 146	
Marysville, Michigan	13, 466		13, 466
Sand Beach, Michigan	11, 867	10. 646	1, 221
Waukegan, Illinois	10, 959	10, 959	
South Haven, Michigan	10, 727	2, 234	8, 493
Leland, Michigan	10, 325		10, 325
Clayton. New York	6, 828	6, 519	309
Sacketts Harbor, New York	6, 508	6, 401	107
Sebawaing, Michigan	6, 204	835	5, 369
Alexandria Bay, New York	6, 104	5, 951	153
Two Rivers. Michigan	5, 863	5, 693	170
Petoskey, Michigan	5, 631	1, 701	3, 930
Glen Arbor, Michigan	4, 741		4, 741
Grindstone Island, New York	4, 608	158	4, 450
Port Sanilac, Michigan	4, 501	590	3, 911
De Pere, Wisconsin	4, 434	1, 181	3, 253
Cross Village, Michigan	2, 670	11	2, 659
Dexter, New York	2, 169	2, 169	
Henderson, New York	1, 968	1, 537	431
Oconto, Wisconsin	1, 842	342	1, 500
Forestville, Michigan	1, 817	1, 005	812
Massena, New York	1, 702	1, 514	188
Wilson, New York	1, 593	1, 479	114
Pultneyville, New York	815	815	
Oak Orchard, New York	650	650	
Sandy Creek, New York	622	622	
Waddington, New York	575	523	52
Chaumont, New York	270	235	35
Olcott, New York	215	162	53
Millins Bay, New York	119	119	
Thousand Island Park, New York	115	115	
Chippewa Bay, New York	84	30	54
Youngstown, New York	75	75	

a Including South Chicago.

TABLE **10.**—FREIGHT RECEIPTS BY EXTENDED LIST OF COMMODITIES—RECEIPTS AT ALL THE LAKE AND RIVER
THE 4 COMPREHENSIVE CLASSES

	PORTS.	Total.	PRODUCTS OF AGRICULTURE.								PRODUCTS OF MINES AND QUARRIES.		
			Wheat.	Corn.	Other grain.	Mill products.	Fruit.	Hay.	Potatoes.	Other.	Coal and coke.	Iron ore.	Other ore.
1	Total	25, 936, 132	919, 162	1, 583, 901	477, 397	992, 066	800	7, 972	1, 674	58, 766	5, 162, 471	7, 626, 073	42, 120
2	Lake Superior	2, 491, 149		22	464	493	176	233	367	131	1, 754, 675	10, 691	
3	Ashland, Wisconsin	487, 358									201, 241		
4	Baraga, Michigan												
5	Bay Mills, Michigan	1, 389		14	160						1, 200		
6	Duluth, Minnesota	683, 162									485, 000	10, 691	
7	Houghton, Michigan	208, 047									144, 261		
8	Marquette, Michigan	143, 346		8							126, 421		
9	Ontonagon, Michigan												
10	Pequaming, Michigan												
11	St. Marys Falls, Michigan	37, 063			304	493	176	233	367	131	24, 938		
12	Superior, Wisconsin	875, 692									720, 000		
13	Two Harbors, Minnesota												
14	Washburn, Wisconsin	55, 092									51, 614		
15	Lakes Huron and St. Clair	1, 029, 356	29, 246	10, 688	16, 275	11, 963	147	234			362, 747	117, 639	
16	Algonac, Michigan	9, 654									7, 193		
17	Alpena, Michigan	11, 969		168	4, 976						6, 000		
18	Bay city, Michigan	66, 246									51, 000		
19	Black River, Michigan	2, 043		140	1, 200	196					500		
20	Cheboygan, Michigan	24, 523	1, 927	474	823						11, 000		
21	Detroit, Michigan	615, 750	1, 819	4, 242	940		147				141, 900	117, 247	
22	East Saginaw, Michigan	48, 686									46, 316		
23	East Tawas, Michigan	1, 172									392	392	
24	Forestville, Michigan	1, 005									25		
25	Marine city, Michigan	45, 575				2					41, 653		
26	Marysville, Michigan												
27	Oscoda, Michigan												
28	Port Huron, Michigan	152, 073	24, 000	5, 600	8, 000	11, 760					24, 000		
29	Port Sanilac, Michigan	590									125		
30	Rogers city, Michigan	491		64	336	5					37		
31	St. Clair, Michigan	14, 030									8, 000		
32	St. Ignace, Michigan	24, 068						234			19, 257		
33	Sand Beach, Michigan	10, 646	1, 500								5, 269		
34	Sebawaing, Michigan	835									80		
35	Lake Michigan	8, 480, 892	4, 553	6, 209	10, 625	118, 423	309	5, 666	131	6, 877	2, 865, 021	1, 004, 630	
36	Benton Harbor, Michigan	34, 614											
37	Charlevoix, Michigan	8, 915	339	614	222	136	50				1, 337	4, 775	
38	Chicago and South Chicago, Illinois.	5, 069, 973				1, 860		3, 400	36	5, 558	1, 329, 364	731, 188	
39	Cross Village, Michigan	11		3	8								
40	De Pere, Wisconsin	1, 181									1, 095		
41	Elk Rapids, Michigan	41, 020	60	17	69						662	36, 950	
42	Escanaba, Michigan	195, 558				35					194, 199		
43	Fayette, Michigan	23, 557		20	48						700	22, 621	
44	Ford river, Michigan	512		112	400								
45	Fruitport, Michigan	47, 854										43, 904	
46	Gladstone, Michigan	132, 356									122, 000		
47	Glen Arbor, Michigan												
48	Grand Haven, Michigan	101, 150	300	53	286	52, 413	49	407		1, 276		39, 200	
49	Green Bay, Wisconsin	101, 369	96		68	26	53				70, 374		
50	Kenosha, Wisconsin	35, 808					13				9, 274		
51	Kewaunee, Wisconsin	9, 273		280			64				250		
52	Leland, Michigan												
53	Ludington, Michigan	276, 229		163	965	60, 160					4, 583		
54	Manistee, Michigan	28, 096		217	1, 193	3, 078		1, 708			9, 187		
55	Manistique, Michigan	3, 690		644	560						1, 600		
56	Manitowoc, Wisconsin	88, 354									75, 000		
57	Marinette, Wisconsin	4, 244			16						2, 870		
58	Menominee, Michigan	7, 426					80				1, 150		
59	Michigan city, Indiana	147, 897							15				
60	Milwaukee, Wisconsin	1, 584, 254						40	80		907, 743	12[illegible], 312	
61	Montague, Michigan	1, 264	6	409	191	479					91		
62	Muskegon, Michigan	151, 303	692	2, 608	1, 840	33		111		43	3, 620		
63	Oconto, Wisconsin	342									300		
64	Pentwater, Michigan	469		181	181						107		
65	Peshtigo Harbor, Wisconsin												
66	Petoskey, Michigan	1, 701	90								15		
67	Port Washington, Wisconsin	21, 197	1, 500	252	3, 610						3, 560	1, 080	
68	Racine, Wisconsin	159, 312									67, 000		
69	St. Joseph, Michigan	60, 516				203					4, 800		
70	Sheboygan, Wisconsin	115, 995									50, 000		
71	South Haven, Michigan	2, 234		188	35								
72	Traverse city, Michigan	6, 566	1, 470	448	933						3, 000		
73	Two Rivers, Michigan	5, 693									1, 200		
74	Waukegan, Illinois	10, 959											

TIONS—Continued.

PORTS, WITH TOTALS FOR THE LAKES AND ST. LAWRENCE RIVER, OF ALL THE COMMODITIES EMBRACED UNDER TREATED OF IN TABLE 7.

PRODUCTS OF MINES AND QUARRIES—continued.			OTHER PRODUCTS.				MANUFACTURES.								
Stone (all kinds).	Salt.	Other.	Animal products.	Live stock.	Lumber.	Ice.	Petroleum.	Sugar.	Iron, pig and bloom.	Other iron manufactures.	Liquors.	Cement, brick, and lime.	All other manufactures.	Miscellaneous merchandise and other commodities.	
311,015	296,513	15,997	63,513	1,215	6,857,257	18,912	28,120	100,434	162.248	300,939	9,650	58,256	16,750	822,911	1
69,587	20,119		301	70	7,910		20,249	2,032	21,623	182,329	310	20,116		379,251	2
	3,450									159,492		1,535		121,640	3
															4
	7.											8			5
35,374	7,851								21,489	15,702		11,745		95,310	6
22,262					1.224							2,206		38,094	7
11,951	224				175							450		4,117	8
															9
															10
	73		301	70	6,511		509	158	134	119	310	399		1,837	11
	6,537						19,740	1,874		7,016		3,698		116,827	12
															13
	1,977											75		1,426	14
25,975	25,043	771			390.434		690		11,241	6,302		9,411		10,550	15
					2,461										16
600		225													17
11,000		46			4,200										18
	7														19
	202				1,065		690		112			180		8,050	20
	21,528				314,995				11,057	1,725		150			21
					2,370										22
					383				5						23
	42				865							73			24
	70				3,783				67						25
															26
															27
14,375	420	500			51,918							9,000		2,500	28
	70				387							8			29
	49														30
					6,030										31
										4,577					32
	2,655				1,222										33
					755										34
51,944	225,582	4,202	2,671	477	3,548,923		6,847	98,402	46,717	109,575	9,140	9,674	4,761	339,533	35
	210				28,700							810		4,894	36
1.020	35				13		65				39	10		260	37
18,176	128,948	1,600	146		2,588,004			84,755	38,781	96,383	8,648			33,126	38
															39
	42				20									24	40
	70				42							3,150			41
288	34						720					282			42
	14				150							4			43
															44
2,300														1,650	45
	4,060									896				5,400	46
															47
2,248	65		1,473		1.435				504	391	75	69		906	48
9,450	5.543	120		11	5,790		1,644	522	604	6,023	6	304	47	688	49
					17.252		2			200				9.067	50
	210	600			346		100			200	200	23		7,000	51
															52
										50				210,308	53
				419						898	172			11,224	54
	189											57		640	55
	1,400	1,600	28		8,126		200			2,000					56
	87				278							87		906	57
	196													6,000	58
1,362	8,483				134,842				3,195						59
3,262	71,944	282	72		412,479		4,046	13,125	2,189	565		2,804	10	41.301	60
	52			36											61
12,113			952	11	119,530				1,438	1,969		825	4,704	814	62
	42														63
															64
															65
	210				505				6					875	66
	420				10,235										67
	140				92,152							20			68
	700				53,839							974			69
	1,400				61,295									3,300	70
	140				1,871										71
	490											225			72
1,725	140				1,378		70					30		1,150	73
	318				10,641										74

TABLE 10.—FREIGHT RECEIPTS BY EXTENDED

	PORTS.	Total.	PRODUCTS OF AGRICULTURE.								PRODUCTS OF MINES AND QUARRIES.		
			Wheat.	Corn.	Other grain.	Mill products.	Fruit.	Hay.	Potatoes.	Other.	Coal and coke.	Iron ore.	Other ore.
1	Lake Erie	12, 957, 483	837, 821	1, 418, 617	331, 124	814, 410	140	446		48, 165	97, 865	6, 490, 518	39, 540
2	Ashtabula, Ohio	2, 205, 595										2, 199, 109	
3	Buffalo, New York	4, 046, 144	781, 548	1, 319, 560	316, 987	666, 651	140	446		47, 101		333, 827	39, 540
4	Cleveland, Ohio	2, 737, 708	22, 494	434	685	252				784	1, 200	1, 951, 564	
5	Dunkirk, New York	17, 146											
6	Erie, Pennsylvania	773, 030	33, 779	98, 623	13, 452	147, 507				280		418, 426	
7	Fairport, Ohio	939, 021										928, 616	
8	Huron, Ohio	13, 694									235	761	
9	Kelleys Island, Ohio	19, 971									1, 500		
10	Lorain, Ohio	346, 899										335, 162	
11	Sandusky, Ohio	305, 029									1, 561	208, 411	
12	Toledo, Ohio	506, 351									93, 369	97, 476	
13	Tonawanda, New York	1, 046, 895										17, 166	
14	Lake Ontario	485, 220	20, 483	16, 438	89, 178	7	5	351	510	3, 274	7, 218		
15	Cape Vincent, New York	22, 398	1, 185	3	782			350	4	1, 780	1, 030		
16	Charlotte, New York	18, 318			5, 406								
17	Chaumont, New York	235									100		
18	Dexter, New York	2, 169									1, 480		
19	Henderson, New York	1, 537									610		
20	Millins Bay, New York	119			1			1		2	110		
21	Oak Orchard, New York	650											
22	Olcott, New York	162											
23	Oswego, New York	402, 847	19, 297	16, 434	78, 340				506	1, 491			
24	Pultneyville, New York	815											
25	Sacketts Harbor, New York	6, 401	1	1			5				3, 406		
26	Sandy Creek, New York	622									482		
27	Sodus Point, New York	11, 911			4, 649								
28	Wilson, New York	1, 479											
29	Youngstown, New York	75											
30	Fair Haven, New York	15, 482				7				1			
31	St. Lawrence river	492, 032	27, 059	131, 927	29, 731	46, 770	23	1, 042	666	319	74, 945	2, 595	2, 580
32	Alexandria Bay, New York	5, 951					23		6	1	2, 933		
33	Chippewa Bay, New York	30											
34	Clayton, New York	6, 519	1	6	5						3, 549	8	
35	Massena, New York	1, 514		14							1, 500		
36	Grindstone Island, New York	158			1			2			122		
37	Morristown, New York	7, 178			144								
38	Ogdensburg, New York	470, 044	27. 058	131, 907	29, 581	46, 770		1, 040	660	316	66, 231	2, 587	2, 580
39	Thousand Island Park, New York	115								2	110		
40	Waddington, New York	523									500		

TIONS—Continued.

LIST OF COMMODITIES, ETC.—Continued.

PRODUCTS OF MINES AND QUARRIES—continued.			OTHER PRODUCTS.				MANUFACTURES.								
Stone (all kinds).	Salt.	Other.	Animal products.	Live stock.	Lumber.	Ice.	Petroleum.	Sugar.	Iron, pig and bloom.	Other iron manufactures.	Liquors.	Cement, brick, and lime.	All other manufactures.	Miscellaneous merchandise and other commodities.	
161,779	25,661	10,812	59,820	....	2,444,580	....	334	....	82,667	718	....	18,872	11,666	61,928	1
2,250	....	....	....	....	4,236	....	....	....	....	....	....	....	....	....	2
9,060	....	3,639	59,820	....	403,951	....	334	....	40,768	....	....	1,550	11,666	9,556	3
130,777	8,646	....	....	....	565,626	....	....	....	41,899	718	....	6,858	....	5,771	4
....	....	....	....	....	17,146	....	....	....	....	....	....	....	....	....	5
....	....	7,081	....	....	17,850	....	....	....	....	....	....	....	....	36,032	6
2,070	....	....	....	....	878	....	....	....	....	....	....	....	....	7,457	7
....	2,310	....	....	....	10,388	....	....	....	....	....	....	....	....	....	8
....	....	....	....	....	18,471	....	....	....	....	....	....	....	....	....	9
4,800	71	....	....	....	6,866	....	....	....	....	....	....	....	....	....	10
....	4,905	....	....	....	87,040	....	....	....	....	....	....	....	....	3,112	11
12.822	9,729	92	....	....	282,399	....	....	....	....	....	....	10,464	....	....	12
....	....	....	....	....	1,029,729	....	....	....	....	....	....	....	....	....	13
1,730	79	212	9	592	320,230	18,912	....	....	....	....	....	165	300	5,527	14
....	....	12	9	563	16,014	....	....	....	....	....	....	....	300	366	15
....	....	....	....	....	12,912	....	....	....	....	....	....	....	....	....	16
....	....	....	....	....	125	....	....	....	....	....	....	....	....	10	17
....	....	200	....	....	436	....	....	....	....	....	....	53	....	....	18
....	77	....	....	12	308	....	....	....	....	....	....	....	....	530	19
....	....	....	....	5	....	....	....	....	....	....	....	....	....	....	20
....	....	....	....	....	650	....	....	....	....	....	....	....	....	....	21
....	....	....	....	....	162	....	....	....	....	....	....	....	....	....	22
....	....	....	....	....	283,058	....	....	....	....	....	....	....	....	3,721	23
....	....	....	....	....	759	....	....	....	....	....	....	56	....	....	24
1,730	2	....	....	12	446	....	....	....	....	....	....	56	....	742	25
....	....	....	....	....	....	....	....	....	....	....	....	....	....	140	26
....	....	....	....	....	288	6,974	....	....	....	....	....	....	....	....	27
....	....	....	....	....	1,479	....	....	....	....	....	....	....	....	....	28
....	....	....	....	....	75	....	....	....	....	....	....	....	....	....	29
....	....	....	....	....	3,518	11,938	....	....	....	....	....	....	....	18	30
....	29	....	712	76	145,180	....	....	....	....	2,015	200	18	23	26,122	31
....	29	....	7	16	789	....	....	....	....	2,015	....	14	11	107	32
....	....	....	....	....	30	....	....	....	....	....	....	....	....	....	33
....	....	....	76	58	2,200	....	....	....	....	....	....	4	12	600	34
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	35
....	....	....	....	2	31	....	....	....	....	....	....	....	....	....	36
....	....	....	200	....	6,834	....	....	....	....	....	....	....	....	....	37
....	....	....	426	....	135,273	....	....	....	....	....	200	....	....	25,415	38
....	....	....	3	....	....	....	....	....	....	....	....	....	....	....	39
....	....	....	....	....	23	....	....	....	....	....	....	....	....	....	40

TABLE **11.**—FREIGHT SHIPMENTS BY EXTENDED LIST OF COMMODITIES—SHIPMENTS FROM ALL THE LAKE AND UNDER THE 4 COMPREHENSIVE CLASSES

	PORTS.	Total.	PRODUCTS OF AGRICULTURE.								PRODUCTS OF MINES AND QUARRIES.		
			Wheat.	Corn.	Other grain.	Mill products.	Fruit.	Hay.	Potatoes.	Other.	Coal and coke.	Iron ore.	Other ore.
1	Total	25, 266, 974	969, 150	1, 929, 614	503, 117	894, 123	26, 184	10, 105	2, 024	73, 751	6, 105, 799	7, 677, 107	29, 442
2	Lake Superior	5, 434, 781	399, 355	55, 112	1, 382	205, 227	10	65	59	834	26, 075	4, 141, 057	29, 442
3	Ashland, Wisconsin	1, 759, 884										1, 663, 021	
4	Baraga, Michigan	59, 278											
5	Bay Mills, Michigan	30, 648			48								
6	Duluth, Minnesota	430, 886	207, 732	49, 901	1, 304	103, 134				818			
7	Houghton, Michigan	78, 144									25, 075		25, 900
8	Marquette, Michigan	1, 567, 539										1, 541, 495	
9	Ontonagon, Michigan	40, 700											200
10	Pequaming, Michigan	54, 193											
11	St. Marys Falls, Michigan	39, 062			30	122	10	65	59	16	1, 000		
12	Superior, Wisconsin	304, 605	191, 623	5, 211		95, 576							3, 342
13	Two Harbors, Minnesota	936, 541										936, 541	
14	Washburn, Wisconsin	133, 301				6, 395							
15	Lakes Huron and St. Clair	2, 344, 451	81, 417	27, 760	6, 204	4, 829	2, 390	2, 530	108	1, 828	13, 574	62, 451	
16	Algonac, Michigan	7, 932											
17	Alpena, Michigan	374, 899											
18	Bay City, Michigan	486, 973											
19	Black River, Michigan	20, 250											
20	Cheboygan, Michigan	194, 417							48				
21	Detroit, Michigan	148, 803	80, 757	27, 536	1, 910	999	1, 865			1, 617	3, 564	2, 156	
22	East Saginaw, Michigan	199, 852									10		
23	East Tawas, Michigan	229, 344											
24	Forestville, Michigan	812	60		597				30	125			
25	Marine city, Michigan	15, 426											
26	Marysville, Michigan	13, 466			40								
27	Oscoda, Michigan	490, 413			64			30				28	
28	Port Huron, Michigan	18, 000									10, 000		
29	Port Sanilac, Michigan	3, 911	600		1, 636			1, 500					
30	Rogers city, Michigan	22, 013											
31	St. Clair, Michigan	27, 523			32			1, 000					
32	St. Ignace, Michigan	83, 827							30			60, 267	
33	Sand Beach, Michigan	1, 221			1, 221								
34	Sebawaing, Michigan	5, 369		224	704	3, 830	525			86			
35	Lake Michigan	10, 090, 366	347, 466	1, 772, 109	489, 971	620, 410	23, 258	7, 056	1, 857	65, 297	257	3, 446, 947	
36	Benton Harbor, Michigan	2, 959					2, 959						
37	Charlevoix, Michigan	53, 909					43		109				
38	Chicago (*a*), Illinois	2, 914, 065	312, 203	1, 769, 621	457, 095	228, 138		927	1, 235	49, 822			
39	Cross Village, Michigan	2, 659	9						120				
40	De Pere, Wisconsin	3, 253	6	38	162	1, 043				4			
41	Elk Rapids, Michigan	31, 088											
42	Escanaba, Michigan	3, 430, 832				4, 508						3, 364, 067	
43	Fayette, Michigan	13, 832	27										
44	Ford River, Michigan	81, 568											
45	Fruitport, Michigan	6, 272											
46	Gladstone, Michigan	155, 234	1, 500			70, 854						82, 880	
47	Glen Arbor, Michigan	4, 741											
48	Grand Haven, Michigan	68, 396				21							
49	Green Bay, Wisconsin	55, 441	1, 650	29	1, 784	21, 474	1	7	17	7	12		
50	Kenosha, Wisconsin	5, 724			3						5		
51	Kewaunee, Wisconsin	23, 354	1, 500		205			800	30	3, 258			
52	Leland, Michigan	10, 325											
53	Ludington, Michigan	351, 398											
54	Manistee, Michigan	601, 814						12					
55	Manistique, Michigan	140, 321											
56	Manitowoc, Wisconsin	25, 023	1, 200	42	824	2, 940		5, 250	150	6, 706			
57	Marinette, Wisconsin	342, 002											
58	Menominee, Michigan	265, 103											
59	Michigan city, Indiana	132			32			60			40		
60	Milwaukee, Wisconsin	351, 554	29, 191	1, 434	28, 847	289, 174				16			
61	Montague, Michigan	71, 084					57						
62	Muskegon, Michigan	851, 440											
63	Oconto, Wisconsin	1, 500											
64	Pentwater, Michigan	32, 642											
65	Peshtigo Harbor, Wisconsin	80, 683											
66	Petoskey, Michigan	3, 930				297			45				
67	Port Washington, Wisconsin	11, 107	180	238	299	600							
68	Racine, Wisconsin	1, 225			80		350						
69	St. Joseph, Michigan	24, 501				1, 341	15, 400			5, 000			
70	Sheboygan, Wisconsin	8, 392		707	640						200		
71	South Haven, Michigan	8, 493					4, 448		151	484			
72	Traverse, Michigan	54, 200											
73	Two Rivers, Michigan	170				20							
74	Waukegan, Illinois												

a Including South Chicago.

TIONS—Continued.

RIVER PORTS, WITH TOTALS FOR THE LAKES AND ST. LAWRENCE RIVER, OF ALL THE COMMODITIES EMBRACED TREATED OF IN TABLE 7.

PRODUCTS OF MINES AND QUARRIES—continued.			OTHER PRODUCTS.				MANUFACTURES.							Miscellaneous merchandise and other commodities.	
Stone (all kinds).	Salt.	Other.	Animal products.	Live stock.	Lumber.	Ice.	Petroleum.	Sugar.	Iron, pig and bloom.	Other iron manufactures.	Liquors.	Cement, brick, and lime.	All other manufactures.		
236, 214	252, 837	7, 590	59, 982	871	5, 348, 398		24, 462	2, 883	153, 976	19, 364	4, 586	123, 206	11, 985	800, 204	1
17, 689	23	3. 627	1, 507	36	468, 157		73	16	26, 664	4	14	464		57, 889	2
					80, 119				16, 621			123			3
					59, 278										4
					30, 600										5
					13, 110									54, 887	6
17, 689					9, 480										7
					16, 004				10, 040						8
					40, 500										9
					54, 193										10
	23		186	36	36, 468		73	16	3	4	14	341		596	11
		3, 627	1, 321		3, 905										12
															13
					124, 500									2. 406	14
	53, 480	3, 903		175	2, 036, 051				21, 482	177	54	10, 173		15, 865	15
	7, 728				204										16
					373, 204									1, 695	17
	5, 377				481, 596										18
					20, 250										19
					188, 507				112					5, 750	20
	882				10, 261				17, 062	146		48			21
					199, 842										22
	12. 974	3. 903			212, 467										23
															24
	9. 859				5, 567										25
					13. 426										26
	294				489, 962					31				4	27
														8, 000	28
				175											29
					22, 013										30
	16, 366											10, 125			31
					18, 752				4, 308		54			416	32
															33
															34
11, 466	173, 957	60	58, 475	660	2, 836, 236		5	2, 867	100, 473	449	2, 768	8, 898	11, 973	107, 451	35
															36
					36, 882				9, 961			115		6, 799	37
	8		55, 985		2, 106			2, 866	7, 018	385	2, 518		11, 689	12, 449	38
					1, 650									880	39
				9					271					1, 720	40
					9, 591				21, 497						41
	32		34		54, 041				8, 092	58					42
									13, 805						43
					81, 568										44
									6, 272						45
															46
					4, 741										47
	350				34, 299				31, 360					2, 366	48
	11, 303		2	410	1, 164		5	1	1, 599	6	75	2, 643	40	13, 212	49
5, 716															50
		60	13	55	10, 013							2, 250		5, 170	51
					9, 225									1, 100	52
	57, 221				258, 520									35, 657	53
	105, 001			8	477, 785								44	18, 964	54
					140, 321										55
			36		5, 625							2, 250			56
	42				341, 445							30		485	57
					265, 103										58
															59
			2, 294						598						60
					70, 917									110	61
					846, 615									4, 825	62
					1, 500										63
					32, 642										64
					80, 683										65
					2, 348							690		550	66
					9, 790										67
			110	125									200	360	68
														2, 760	69
5, 750											175	920			70
			1	53	3, 312									44	71
					54, 200										72
					150										73
															74

TRAFFIC OPERA

TABLE 11.—FREIGHT SHIPMENTS BY EXTENDED

	PORTS.	Total.	PRODUCTS OF AGRICULTURE.								PRODUCTS OF MINES AND QUARRIES.		
			Wheat.	Corn.	Other grain.	Mill products.	Fruit.	Hay.	Potatoes.	Other.	Coal and coke.	Iron ore.	Other ore.
1	Lake Erie	6,386,392	140,912	74,528	5,560	63,657	250			215	5,196,182	26,644	
2	Ashtabula, Ohio	489,585									489,585		
3	Buffalo, New York	2,683,993									2,156,670		
4	Cleveland, Ohio	883,862		576						215	825,030	26,644	
5	Dunkirk, New York												
6	Erie, Pennsylvania	498,958									410,403		
7	Fairport, Ohio	59,438									59,438		
8	Huron, Ohio	56,486	486								56,000		
9	Kelleys Island, Ohio	212,182					250						
10	Lorain, Ohio	273,874									273,671		
11	Sandusky, Ohio	297,374	8,063								275,385		
12	Toledo, Ohio	930,640	132,363	73,952	5,560	63,657					650,000		
13	Tonawanda, New York												
14	Lake Ontario	771,727		1			276	454		69	764,355		
15	Cape Vincent, New York	421					176			9			
16	Charlotte, New York	350,043									350,000		
17	Chaumont, New York	35						35					
18	Dexter, New York												
19	Henderson, New York	431						419					
20	Millins Bay, New York												
21	Oak Orchard, New York												
22	Olcott, New York	53		1			47				5		
23	Oswego, New York	288,271									282,098		
24	Pultneyville, New York												
25	Sacketts Harbor, New York	107											
26	Sandy Creek, New York												
27	Sodus Point, New York	12,935									12,935		
28	Wilson, New York	114					53			60			
29	Youngstown, New York												
30	Fairhaven, New York	119,317									119,317		
31	St. Lawrence river	239,257		104						5,508	105,356	8	
32	Alexandria Bay, New York	153		104									
33	Chippewa Bay, New York	54								54			
34	Clayton, New York	309								90		8	
35	Massena, New York	188								188			
36	Grindstone Island, New York	4,450											
37	Morristown, New York	41,191									40,000		
38	Ogdensburg, New York	192,860								5,124	65,356		
39	Thousand Island Park, New York.												
40	Waddington, New York	52								52			

TIONS—Continued.

LIST OF COMMODITIES, ETC.—Continued.

PRODUCTS OF MINES AND QUARRIES—continued.			OTHER PRODUCTS.				MANUFACTURES.							Miscellaneous merchandise and other commodities.	
Stone (all kinds).	Salt.	Other.	Animal products.	Live stock.	Lumber.	Ice.	Petroleum.	Sugar.	Iron, pig and bloom.	Other iron manufactures.	Liquors.	Cement brick, and lime.	All other manufactures.		
202, 601	25, 327				6, 200				5, 335	18, 704	1, 750	103, 648		514, 879	1
	25, 299														2
7, 550	28				1, 092					6, 981		74, 910		420, 133	3
									5, 335	11, 723		131		5, 538	4
															5
														88, 555	6
															7
															8
181, 125											1, 750	28, 607		450	9
13, 926														203	10
					5, 108										11
															12
															13
8	50				12		142		22	30		23	12	6, 273	14
8							·99		22	30			12	65	15
							43								16
															17
															18
					8									4	19
															20
															21
															22
	50											23		6, 100	23
															24
					4									103	25
															26
															27
														1	28
															29
															30
4, 450					1, 742		24, 242							97, 847	31
					37									12	32
															33
					176									35	34
															35
4, 450															36
					29		662							500	37
					1. 500		23, 580							97, 300	38
															39
															40

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TABLE **12.**—FREIGHT MOVEMENT OF COMBINED RECEIPTS AND SHIPMENTS BY EXTENDED LIST OF COMMODITIES—OF ALL THE COMMODITIES EMBRACED UNDER THE 4

	PORTS.	Total.	PRODUCTS OF AGRICULTURE.								PRODUCTS OF MINES AND QUARRIES.		
			Wheat.	Corn.	Other grain.	Mill products.	Fruit.	Hay.	Potatoes.	Other.	Coal and coke.	Iron ore.	Other ore.
1	Total	51, 203, 106	1, 888, 312	3, 513, 515	980, 514	1, 886, 189	26, 984	18, 077	3, 698	132, 517	11, 268, 270	15, 303, 180	71, 562
2	Lake Superior	7, 925, 930	399, 355	55, 134	1, 846	205, 720	186	298	426	965	1, 780, 750	4, 151, 748	29, 442
3	Ashland, Wisconsin	2, 247, 242									201, 241	1, 663, 021	
4	Baraga, Michigan	59, 278											
5	Bay Mills, Michigan	32, 037		14	208						1, 200		
6	Duluth. Minnesota	1, 114, 048	207, 732	49, 901	1, 304	103, 134				818	485, 000	10, 691	
7	Houghton, Michigan	286, 191									169, 336		25, 900
8	Marquette, Michigan	1, 710, 885		8							126, 421	1, 541, 495	
9	Ontonagon, Michigan	40, 700											200
10	Pequaming, Michigan	54, 193											
11	St. Marys Falls, Michigan	76, 125			334	615	186	298	426	147	25, 938		
12	Superior, Wisconsin	1, 180, 297	191, 623	5, 211		95, 576					720, 000		3, 342
13	Two Harbors, Minnesota	936, 541										936, 541	
14	Washburn, Wisconsin	188, 393				6, 395					51, 614		
15	Lakes Huron and St. Clair	3, 373, 807	110, 663	38, 448	22, 479	16, 792	2, 537	2, 764	108	1, 828	376, 321	180, 090	
16	Algonac, Michigan	17, 586									7, 193		
17	Alpena, Michigan	386, 868		168	4, 976						6, 000		
18	Bay city, Michigan	553, 219									51, 000		
19	Black River, Michigan	22, 293		140	1, 200	196					500		
20	Cheboygan, Michigan	218, 940	1. 927	474	823				48		11. 000		
21	Detroit, Michigan	764, 553	82, 576	31, 778	2, 850	999	2, 012			1, 617	145, 464	119. 463	
22	East Saginaw, Michigan	248, 538									46, 326		
23	East Tawas, Michigan	230, 516									392	392	
24	Forestville, Michigan	1, 817	60		597				30	125	25		
25	Marine city, Michigan	61, 001				2					41, 653		
26	Marysville, Michigan	13, 466			40								
27	Oscoda, Michigan	490, 413			64			30				28	
28	Port Huron, Michigan	170, 073	24, 000	5, 600	8, 000	11, 760					34, 000		
29	Port Sanilac, Michigan	4, 501	600		1, 636			1, 500			125		
30	Rogers city, Michigan	22, 504		64	336	5					37		
31	St. Clair, Michigan	41, 553			32			1, 000			8, 000		
32	St. Ignace, Michigan	107, 895						234	30		19, 257	60, 267	
33	Sand Beach, Michigan	11, 867	1, 500		1, 221						5, 269		
34	Sebawaing, Michigan	6, 204		224	704	3, 830	525			80	80		
35	Lake Michigan	18, 571, 258	352, 019	1, 778, 318	500, 596	738, 833	23, 567	12, 722	1, 988	72. 174	2, 865, 278	4, 451, 577	
36	Benton Harbor, Michigan	37, 573					2, 959						
37	Charlevoix. Michigan	62, 824	339	614	222	136	93		109		1. 337	4, 775	
38	Chicago and South Chicago, Illinois.	7, 984, 038	312, 203	1, 769, 621	457, 095	229, 998		4. 327	1, 271	55, 380	1, 329, 364	731, 188	
39	Cross Village, Michigan	2, 670	9	3	[illegible]				120				
40	De Pere, Wisconsin	4, 434	6	38	162	1, 043				4	1, 095		
41	Elk Rapids. Michigan	72, 108	60	17	69						662	36, 950	
42	Escanaba, Michigan	3, 626, 390				4, 543					194, 199	3, 364, 067	
43	Fayette, Michigan	37, 389	27	20	48						700	22, 621	
44	Ford River, Michigan	82, 080		112	400								
45	Fruitport, Michigan	54, 126										43, 904	
46	Gladstone, Michigan	287, 590	1, 500			70, 854					122, 000	82. 880	
47	Glen Arbor, Michigan	4, 741											
48	Grand Haven, Michigan	169, 546	300	53	286	52, 434	49	407		1, 276		39, 200	
49	Green Bay, Wisconsin	156, 810	1, 746	29	1, 852	21, 500	54	7	17	7	70, 386		
50	Kenosha, Wisconsin	41, 532			3		13				9, 279		
51	Kewaunee, Michigan	32, 627	1, 500	280	205		64	800	30	3, 258	250		
52	Leland, Michigan	10, 325											
53	Ludington, Michigan	627, 627		163	965	60, 160					4, 583		
54	Manistee, Michigan	629, 910		217	1, 193	3, 078		1, 720			9, 187		
55	Manistique, Michigan	144, 011		644	560						1, 600		
56	Manitowoc, Wisconsin	113, 377	1, 200	42	824	2, 940		5, 250	150	6, 706	75, 000		
57	Marinette, Wisconsin	346, 246			16						2, 870		
58	Menominee, Michigan	272, 529					80				1. 150		
59	Michigan city, Indiana	148, 029			32			60	15		40		
60	Milwaukee, Wisconsin	1, 935, 808	29, 191	1, 434	28, 847	289, 174		40	80	16	907, 743	124, 312	
61	Montague, Michigan	72, 348	6	409	191	479	57				91		
62	Muskegon, Michigan	1, 002, 743	692	2, 608	1, 840	33		111		43	3, 620		
63	Oconto, Wisconsin	1, 842									300		
64	Pentwater, Michigan	33, 111		181	181						107		
65	Peshtigo Harbor, Wisconsin	80, 683											
66	Petoskey, Michigan	5, 631	90			297			45		15		
67	Port Washington, Wisconsin	32, 304	1, 680	490	3, 909	600					3, 500	1, 680	
68	Racine, Wisconsin	160, 537			80		350				67, 000		
69	St. Joseph, Michigan	85, 017				1, 544	15, 400			5. 000	4, 800		
70	Sheboygan, Wisconsin	124, 387		707	640						50, 200		
71	South Haven, Michigan	10, 727		188	35		4, 448		151	484			
72	Traverse city, Michigan	60, 766	1, 470	448	933						3, 000		
73	Two Rivers, Michigan	5, 863				20					1, 200		
74	Waukegan, Illinois	10, 959											

TIONS—Continued.

TOTAL MOVEMENT TO AND FROM ALL LAKE PORTS, WITH TOTALS FOR EACH LAKE AND ST. LAWRENCE RIVER, COMPREHENSIVE CLASSES TREATED OF IN TABLE 7.

PRODUCTS OF MINES AND QUARRIES—continued.			OTHER PRODUCTS.				MANUFACTURES.							Miscellaneous merchandise and other commodities.	
Stone (all kinds).	Salt.	Other.	Animal products.	Live stock.	Lumber.	Ice.	Petroleum.	Sugar.	Iron, pig and bloom.	Other iron manufactures.	Liquors.	Cement, brick, and lime.	All other manufactures.		
547, 229	549, 350	23, 587	123, 495	2, 086	12, 205, 655	18, 912	52, 582	103, 317	316, 224	320, 303	14, 236	181, 462	28, 735	1, 623, 115	1
87, 276	20, 142	3, 627	1, 808	106	476, 067		20, 322	2, 018	48, 287	182, 333	324	20, 580		437, 140	2
	3, 450				80, 119				16, 621	159, 492		1, 658		121, 640	3
					59, 278										4
	7				30, 600							8			5
35, 374	7, 851				13, 110				21, 489	15, 702		11, 745		150, 197	6
39, 951					10, 704							2, 206		38, 094	7
11, 951	224				16, 179				10, 040			450		4, 117	8
					40, 500										9
					54, 193										10
	96		487	106	42, 979		582	174	137	123	324	740		2, 433	11
	6, 537	3, 627	1, 321		3, 905		19, 740	1, 874		7, 016		3, 698		116, 827	12
															13
	1, 977				124, 500							75		3, 832	14
25, 975	78, 523	4, 674		175	2, 426, 485		690		32, 723	6, 479	54	19, 584		26, 415	15
	7, 728				2, 665										16
600		225			373, 204									1, 695	17
11, 000	5, 377	46			485, 796										18
	7				20, 250										19
	202				189, 572		690		224			180		13, 800	20
	22, 410				325, 256				28, 119	1, 871		198			21
					202, 212										22
	12, 974	3, 903			212, 850				5						23
	42				865							73			24
	9, 929				9, 350				67						25
					13, 426										26
	294				489, 962					31				4	27
14, 375	420	500			51, 918							9, 000		10, 500	28
	70			175	387							8			29
	49				22, 013										30
	16, 366				6, 030							10, 125			31
					18, 752				4, 308	4, 577	54			416	32
	2, 655				1, 222										33
					755										34
63, 410	399, 539	4, 262	61, 146	1, 137	6, 385, 159		6, 852	101, 269	147, 190	110, 024	11, 908	18, 572	16, 734	446, 984	35
	210				28, 700							810		4, 894	36
1, 020	35				36, 895		65		9, 961		39	125		7, 059	37
18, 176	128, 956	1, 600	56, 131		2, 590, 110			87, 621	45, 799	96, 768	11, 166		11, 689	45, 575	38
					1, 650									880	39
	42			9	20				271					1, 744	40
	70				9, 633				21, 497			3, 150			41
288	66		34		54, 041		720		8, 092	58		282			42
	14				150				13, 805			4			43
					81, 568										44
2, 300									6, 272					1, 650	45
	4, 060									896				5, 400	46
					4, 741										47
2, 248	415		1, 473		35, 734				31, 864	391	75	69		3, 272	48
9, 450	16, 846	120	2	421	6, 954		1, 649	523	2, 203	6, 029	81	2, 947	87	13, 900	49
5, 716					17, 252		2			200				9, 067	50
	210	660	13	55	10, 359		100			200	200	2, 273		12, 170	51
					9, 225									1, 100	52
	57, 221				258, 520					50				245, 965	53
	105, 001			427	477, 785					898	172		44	30, 188	54
	189				140, 321							57		640	55
	1, 400	1, 600	64		13, 751		200			2, 000		2, 250			56
	129				341, 723							117		1, 391	57
	196				265, 103									6, 000	58
1, 362	8, 483				134, 842				3, 195						59
3, 262	71, 944	282	2, 366		412, 479		4, 046	13, 125	2, 787	565		2, 804	10	41, 301	60
	52			36	70, 917									110	61
12, 113			952	11	966, 145				1, 438	1, 969		825	4, 704	5, 639	62
	42				1, 500										63
					32. 642										64
					80, 683										65
	210				2, 853				6			690		1, 425	66
	420				20, 025										67
	140		110	125	92, 152							20	200	360	68
	700				53, 839							974		2, 760	69
5. 750	1, 400				61, 295						175	920		3, 300	70
	140		1	53	5, 183									44	71
	490				54, 200							225			72
1, 725	140				1, 528		70					30		1, 150	73
	318				10, 641										74

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TABLE **12.**—FREIGHT MOVEMENT OF COMBINED RECEIPTS AND

	PORTS.	Total.	PRODUCTS OF AGRICULTURE.								PRODUCTS OF MINES AND QUARRIES.		
			Wheat.	Corn.	Other grain.	Mill products.	Fruit.	Hay.	Potatoes.	Other.	Coal and coke.	Iron ore.	Other ore.
1	Lake Erie	19,343,875	978,733	1,493,145	336,684	878,067	390	446	....	48,380	5,294,047	6,517,162	39,540
2	Ashtabula, Ohio	2,695,180	....	....	....	....	....	....	....	....	489,585	2,199,109	....
3	Buffalo, New York	6,730,137	781,548	1,319,560	316,987	666,651	140	446	....	47,101	2,156,670	333,827	39,540
4	Cleveland, Ohio	3,621,570	22,494	1,010	685	252	....	....	....	999	826,230	1,978,208	....
5	Dunkirk, New York	17,146	....	....	....	....	....	....	....	....	....	....	....
6	Erie, Pennsylvania	1,271,988	33,779	98,623	13,452	147,507	....	....	....	280	410,403	418,426	....
7	Fairport, Ohio	998,459	....	....	....	....	....	....	....	....	59,438	928,616	....
8	Huron, Ohio	70,180	486	....	....	....	....	....	....	....	56,235	761	....
9	Kelleys Island, Ohio	232,153	....	....	....	....	250	....	....	....	1,500	....	....
10	Lorain, Ohio	620,773	....	....	....	....	....	....	....	....	273,671	335,162	....
11	Sandusky, Ohio	602,403	8,063	....	....	....	....	....	....	....	276,946	208,411	....
12	Toledo, Ohio	1,436,991	132,363	73,952	5,560	63,657	....	....	....	....	743,369	97,476	....
13	Tonawanda, New York	1,046,895	....	....	....	....	....	....	....	....	....	17,166	....
14	Lake Ontario	1,256,947	20,483	16,439	89,178	7	281	805	510	3,343	771,573	....	....
15	Cape Vincent, New York	22,819	1,185	3	782	....	176	350	4	1,789	1,030	....	....
16	Charlotte, New York	368,361	....	....	5,406	....	....	....	....	....	350,000	....	....
17	Chaumont, New York	270	....	....	....	....	....	35	....	....	100	....	....
18	Dexter, New York	2,169	....	....	....	....	....	....	....	....	1,480	....	....
19	Henderson, New York	1,968	....	....	....	....	....	419	....	....	610	....	....
20	Millins Bay, New York	119	....	....	1	....	....	1	....	2	110	....	....
21	Oak Orchard, New York	650	....	....	....	....	....	....	....	....	....	....	....
22	Olcott, New York	215	....	1	....	....	47	....	....	....	5	....	....
23	Oswego, New York	691,118	19,297	16,434	78,340	....	....	....	506	1,491	282,098	....	....
24	Pultneyville, New York	815	....	....	....	....	....	....	....	....	....	....	....
25	Sacketts Harbor, New York	6,508	1	1	....	....	5	....	....	....	3,406	....	....
26	Sandy creek, New York	622	....	....	....	....	....	....	....	....	482	....	....
27	Sodus Point, New York	24,846	....	....	4,649	....	....	....	....	....	12,935	....	....
28	Wilson, New York	1,593	....	....	....	....	53	....	....	60	....	....	....
29	Youngstown, New York	75	....	....	....	....	....	....	....	....	....	....	....
30	Fair Haven, New York	134,799	....	....	....	7	....	....	....	1	119,317	....	....
31	St. Lawrence river	731,289	27,059	132,031	29,731	46,770	23	1,042	666	5,827	180,301	2,603	2,580
32	Alexandria Bay, New York	6,104	....	104	....	....	23	....	6	1	2,933	....	....
33	Chippewa Bay, New York	84	....	....	....	....	....	....	....	54	....	....	....
34	Clayton, New York	6,828	1	6	5	....	....	....	....	90	3,549	16	....
35	Massena, New York	1,702	....	14	....	....	....	....	....	188	1,500	....	....
36	Grindstone Island, New York	4,608	....	....	1	....	....	2	....	....	122	....	....
37	Morristown, New York	48,369	....	....	144	....	....	....	....	....	40,000	....	....
38	Ogdensburg, New York	662,904	27,058	131,907	29,581	46,770	....	1,040	660	5,440	131,587	2,587	2,580
39	Thousand Island Park, New York	115	....	....	....	....	....	....	....	2	110	....	....
40	Waddington, New York	575	....	....	....	....	....	....	....	52	500	....	....

TIONS—Continued.

SHIPMENTS BY EXTENDED LIST OF COMMODITIES, ETC.—Continued.

PRODUCTS OF MINES AND QUARRIES—continued.			OTHER PRODUCTS.				MANUFACTURES.							Miscellaneous merchandise and other commodities.	
Stone (all kinds).	Salt.	Other.	Animal products,	Live stock.	Lumber.	Ice.	Petroleum.	Sugar.	Iron, pig and bloom.	Other iron manufactures.	Liquors.	Cement, brick, and lime.	All other manufactures.		
364, 380	50, 988	10, 812	59, 820		2, 450, 780		334		88, 002	19, 422	1, 750	122, 520	11, 666	576, 807	1
2, 250					4, 236										2
9, 060	25, 299	3, 639	59, 820		403, 951		334		40, 768	6, 981		76, 460	11, 666	429. 689	3
138, 327	8, 674				566, 718				47, 234	12, 441		6, 989		11, 309	4
					17, 146										5
		7, 081			17, 850									124, 587	6
2, 070					878									7, 457	7
	2, 310				10, 388										8
181, 125					18, 471						1, 750	28, 607		450	9
4, 800	71				6, 866									203	10
13, 926	4. 905				87, 040									3, 112	11
12, 822	9, 729	92			287, 507							10, 464			12
					1, 029, 729										13
1, 738	129	212	9	592	320, 242	18, 912	142		22	30		188	312	11, 800	14
8		12	9	563	16, 014		99		22	30			312	431	15
					12, 912		43								16
					125									10	17
		200			436							53			18
	77			12	316									534	19
				5											20
					659										21
					162										22
	50				283. 058							23		9, 821	23
					759							56			24
1, 730	2			12	450							56		845	25
														140	26
					288	6, 974									27
					1, 479									1	28
					75										29
					3, 518	11, 938								18	30
4, 450	29		712	76	146, 922		24, 242			2, 015	200	18	23	123, 969	31
	29		7	16	826					2, 015		14	11	119	32
					30										33
			76	58	2, 376							4	12	635	34
															35
4, 450				2	31										36
			200		6, 863		662							500	37
			426		136, 773		23, 580				200			122, 715	38
			3												39
					23										40

TABLE **13.**—TOTAL FREIGHT MOVEMENT BY EXTENDED LIST OF COMMODITIES—TOTAL SHIPMENT AND RECEIPTS—GIVEN ONLY BY LAKE

	LAKES AND RIVER.	Total.	PRODUCTS OF AGRICULTURE.								PRODUCTS OF MINES AND QUARRIES.		
			Wheat.	Corn.	Other grain.	Mill products.	Fruit.	Hay.	Potatoes.	Other.	Coal and coke.	Iron ore.	Other ore.
1	Receipts and shipments	51, 203, 106	1, 888, 312	3, 513, 515	980, 514	1,886,189	26, 984	18, 077	3, 698	132, 517	11, 268, 270	15, 303, 180	71, 562
2	Lake Superior	7, 925. 930	399, 355	55, 134	1, 846	205, 720	186	298	426	965	1, 780, 750	4, 151, 748	29, 442
3	Lakes Huron and St. Clair	3, 373, 807	110, 663	38, 448	22, 479	16, 792	2, 537	2, 764	108	1, 828	376, 321	180, 090	....
4	Lake Michigan	18, 571, 258	352, 019	1, 778, 318	500, 596	738, 833	23, 567	12, 722	1, 988	72, 174	2, 865, 278	4, 451, 577	....
5	Lake Erie	19. 343, 875	978, 733	1, 493, 145	336, 684	878, 067	390	446	....	48, 380	5, 294, 047	6, 517, 162	39, 540
6	Lake Ontario	1, 256, 947	20, 483	16, 439	89, 178	7	281	805	510	3, 343	771, 573	....	....
7	St. Lawrence river	731, 289	27, 059	132, 031	29, 731	46, 770	23	1, 042	666	5, 827	180, 301	2, 603	2, 580
8	Receipts	25, 936, 132	919, 162	1, 583, 901	477 397	992, 066	800	7, 972	1, 674	58, 766	5, 162, 471	7, 626, 073	42, 120
9	Lake Superior	2, 491, 149	....	22	464	493	176	233	367	131	1, 754, 675	10, 691	....
10	Lakes Huron and St. Clair	1, 029, 356	29, 246	10, 688	16, 275	11, 963	147	234	....	....	362, 747	117, 639	....
11	Lake Michigan	8, 480, 892	4, 553	6, 209	10, 625	118, 423	309	5, 666	131	6, 877	2, 865, 021	1, 004, 630	....
12	Lake Erie	12, 957, 483	837, 821	1, 418, 617	331, 124	814, 410	140	446	....	48, 165	97, 865	6, 490, 518	39, 540
13	Lake Ontario	485, 220	20, 483	16, 438	89, 178	7	5	351	510	3, 274	7, 218	....	....
14	St. Lawrence river	492, 032	27, 059	131, 927	29, 731	46, 770	23	1, 042	666	319	74, 945	2, 595	2, 580
15	Shipments	25, 266, 974	969, 150	1, 929, 614	503, 117	894, 123	26, 184	10, 105	2, 024	73, 751	6, 105, 790	7, 677, 107	29, 442
16	Lake Superior	5, 434, 781	399, 355	55, 112	1, 382	205, 227	10	65	59	834	26, 075	4, 141, 057	29, 442
17	Lakes Huron and St. Clair	2, 344, 451	81, 417	27, 760	6, 204	4. 829	2, 390	2, 530	108	1, 828	13, 574	62, 451	....
18	Lake Michigan	10, 090, 366	347, 466	1, 772, 109	489, 971	620, 410	23, 258	7, 056	1, 857	65, 297	257	3, 446, 947	....
19	Lake Erie	6, 386, 392	140, 912	74, 528	5, 560	63, 657	250	....	....	215	5, 196, 182	26, 644	....
20	Lake Ontario	771, 727	....	1	....	....	276	454	....	69	764, 355	....	....
21	St. Lawrence river	239, 257	....	104	....	....	....	....	....	5, 508	105, 356	8	....

TIONS—Continued.

OF ALL THE COMMODITIES EMBRACED WITHIN THE 4 COMPREHENSIVE CLASSES TREATED OF IN TABLE 7, BUT AND RIVER TOTALS.

PRODUCTS OF MINES AND QUARRIES—continued.			OTHER PRODUCTS.				MANUFACTURES.							Miscellaneous merchandise and other commodities.	
Stone (all kinds).	Salt.	Other.	Animal products.	Live stock.	Lumber.	Ice.	Petroleum.	Sugar.	Iron, pig and bloom.	Other iron manufactures.	Liquors.	Cement, brick, and lime.	Other.		
547,229	549,350	23,587	123,495	2,086	12,205,655	18,912	52,582	103,317	316,224	320,303	14,236	181,462	28,735	1,623,115	1
87,276	20,142	3,627	1,808	106	476,067		20,322	2,048	48,287	182,333	324	20,580		437,140	2
25,975	78,523	4,674		175	2,426,485		690		32,723	6,479	54	19,584		26,415	3
63,410	399,539	4,262	61,146	1,137	6,385,159		6,852	101,269	147,190	110,024	11,908	18,572	16,734	446,984	4
364,380	50,988	10,812	59,820		2,450,780		334		88,002	19,422	1,750	122,520	11,666	576,807	5
1,738	129	212	9	592	320,242	18,912	142		22	30		188	312	11,800	6
4.450	29		712	76	146,922		24,242			2,015	200	18	23	123,969	7
311,015	296,513	15,997	63,513	1,215	6,857,257	18,912	28,120	100,434	162,248	300,939	9,650	58,256	16,750	822,911	8
69,587	20,119		301	70	7,910		20,249	2,032	21,623	182,329	310	20,116		379,251	9
25,975	25.043	771			390,434		690		11,241	6,302		9,411		10,550	10
51,944	225,582	4,202	2,671	477	3,548,923		6,847	98,402	46,717	109,575	9,140	9,674	4,761	339,533	11
161,779	25,661	10,812	59,820		2,444,580		334		82,667	718		18,872	11,666	61,928	12
1,730	79	212	9	592	320,230	18,912						165	300	5,527	13
	29		712	76	145,180					2,015	200	18	23	26,122	14
236,214	252,837	7,590	59.982	871	5,348,398		24,462	2,883	153,976	19,364	4,586	123,206	11,985	800,204	15
17,689	23	3,627	1,507	36	468,157		73	16	26,664	4	14	464		57,889	16
	53,480	3,903		175	2,036,051				21,482	177	54	10,173		15,865	17
11,466	173,957	60	58,475	660	2,836,236		5	2,867	100,473	449	2,768	8,898	11,973	107,451	18
202,601	25,327				6,200				5,335	18,704	1,750	103,648		514,879	19
8	50				12		142		22	30		23	12	6,273	20
4,450					1,742		24,242							97,847	21

TABLE **14.**—FREIGHT MOVEMENT OF UNCLASSIFIED COMMODITIES, NOT INCLUDED IN

	PORTS.	MERCHANDISE (PACKAGES).		POUND POLES (NUMBER).		WHITE LEAD (POUNDS).		HOUSEHOLD GOODS (PACKAGES).		HOUSEHOLD GOODS (LOTS).		VEHICLES (NUMBER).	
		Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1	Total	5, 656, 206	3, 281, 196		4, 071		500		42		13		13
2	Alpena				2, 950								
3	Ashtabula	87											
4	Charlevoix	1, 083											
5	Chicago	5, 171, 121	1, 990, 726										
6	Grand Haven	106, 665	244, 959										
7	Green Bay	23, 925	1, 735				500		42		13		13
8	Lorain				1, 121								
9	Michigan city		5, 300										
10	Montague	19, 050	1, 800										
11	Muskegon	256, 988	122, 976										
12	Racine												
13	St. Ignace	37, 565	879, 980										
14	St. Joseph	20, 800	33, 720										
15	South Chicago	18, 922											

	PORTS.	TWINE BINDERS (NUMBER).		TOYS (CASES).		CABBAGE (NUMBER).		EMPTY CASES (NUMBER).		JARS (CASES).		CROCKERY (CASES).	
		Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
16	Total	1, 000		25		2, 000		696		260		239	
17	Alpena												
18	Ashtabula												
19	Charlevoix												
20	Chicago												
21	Grand Haven												
22	Green Bay	1, 000		25		2, 000		696		260		239	
23	Lorain												
24	Michigan city												
25	Mellins Bay												
26	Montague												
27	Muskegon												
28	Olcott												
29	Racine												
30	St. Ignace												
31	St. Joseph												
32	South Chicago												

	PORTS.	ONIONS (POUNDS).		CHESTNUTS (POUNDS).		QUINCES (POUNDS).		PARING PINS (NUMBER).		THRASHING MACHINES (NUMBER).	
		Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
33	Total		800		100		200		7, 000		30
34	Olcott		800		100		200				
35	Oscoda								7, 000		
36	Racine										30
37	St. Ignace										
38	St. Joseph										
39	Sault Ste. Marie										

TIONS—Continued.

THE FOREGOING TABLES, AND GIVEN BY THEIR VARIOUS UNITS OF MEASUREMENT.

FURNITURE (BUNDLES).		EMPTY BARRELS (NUMBER).		JUGS (NUMBER).		TRUNKS (NUMBER).		SASH (PACKAGES).		PIANOS (NUMBER).		PULP (BALES).		
Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	
	29	1,242	6,200		450		8,031		25		1	560		1
														2
														3
														4
														5
														6
	29	1,242	6,200		450		31		25		1	560		7
														8
														9
														10
														11
							8,000							12
														13
														14
														15

CURRANTS (BARRELS).		RAILROAD IRON (BARS).		TOBACCO (CASES).		FISH POLES (NUMBER).		BARLEY (BUSHELS).		SUNDRIES (PACKAGES).		BLACKBERRIES (GALLONS).		
Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	
30		558		159		1,600	1,845	4		110,277	96,189		10	16
														17
														18
														19
														20
														21
30		558		159		1,600								22
														23
														24
								4						25
														26
							1,845			110,277	96,189			27
													10	28
														29
														30
														31
														32

FAN MILLS (NUMBER).		FEED CUTTERS (NUMBER).		SALT FISH (PACKAGES).		BASKETS (BUNDLES).		ROPE (COILS).		SPIKES (KEGS).		
Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	
	300		100		4,454		33,660	66	49		5	33
												34
												35
	300		100									36
					4,454							37
							33,660					38
								66	49		5	39

TRAFFIC OPERATIONS—Continued.

TABLE 15.—FREIGHT MOVEMENT OF UNCLASSIFIED COMMODITIES—REDUCTION OF THE UNCLASSIFIED COMMODITIES FROM THEIR VARIOUS UNITS OF MEASUREMENT INTO THE UNIFORM UNIT OF TONS.

COMMODITIES.	DESCRIPTION AND NUMBER OF UNITS OF MEASUREMENT.		Estimated weight in pounds per unit.	Estimated result in tons.
	Number.	Unit.		
Total	9,220,235		a99.95	460,777.23
Merchandise	8,937,402	Packages	100.00	446,870.10
Pound poles	4,071	Pound poles	550.00	1,119.53
White lead	500	Pounds	1.00	0.25
Household goods	42	Packages	100.00	2.10
Household goods	13	Lots	100.00	0.65
Vehicles	13	Vehicles	200 00	1.30
Furniture	29	Bundles	100.00	1.45
Empty barrels	7,442	Empty barrels	80.00	297.68
Jugs	450	Jugs	10.00	2.25
Trunks	8,031	Trunks	50.00	200.78
Sash	25	Packages	100.00	1.25
Piano	1	Piano	800.00	0.40
Pulp	560	Bales	100.00	28.00
Twine binders	1,000	Twine binders	300.00	150.00
Toys	25	Cases	100.00	1.25
Cabbages	2,000	Cabbages	10.00	10.00
Empty cases	696	Empty cases	25.00	8.70
Jars	260	Cases	150.00	19.50
Crockery	239	....do	500.00	59.75
Currants	30	Barrels	150.00	2.25
Railroad iron	558	Bars	500.00	139.50
Tobacco	159	Cases	450.00	35.78
Fish poles	3,445	Fish poles	5.00	8.61
Barley	4	Bushels	48.00	0.10
Sundries	206,466	Packages	100.00	10,323.30
Blackberries	10	Gallons	10.00	0.05
Onions	800	Pounds	1.00	0.40
Chestnuts	100	....do	1.00	0.05
Quinces	200	....do	1.00	0.10
Paring pins	7,000	Paring pins	1.00	3.50
Thrashing machines	30	Thrashing machines	6,000.00	90.00
Fan mills	300	Fan mills	500.00	75.00
Feed cutters	100	Feed cutters	500.00	25.00
Salt fish	4,454	Packages	200.00	445.40
Baskets	33,660	Bundles	50.00	841.50
Rope	115	Coils	200.00	11.50
Spikes	5	Kegs	100.00	0.25

a Average weight per unit.

TABLE 16.—FREIGHT MOVEMENT BY CARGO TONNAGE—RESULT IN TONS OF THE LAKE AND RIVER FREIGHTING, GROUPED BY PRINCIPAL COMMODITIES, AND REACHED BY MAKING AN AGGREGATE OF EACH PORT'S LARGER BUSINESS, WHETHER OF RECEIPTS OR SHIPMENTS.

[Canadian coastwise trade excluded.]

COMMODITIES.	Amount in tons.	Per cent of commodities and class to total tonnage.
Total	27,394,767	100.00
Class I.—Products of agriculture	4,506,011	16.45
Wheat	969,150	3.54
Corn	1,929,614	7.04
Other grain	503,117	1.84
Mill products	992,066	3.62
All other farm products	112,064	0.41
Class II.—Products of mines and quarries	14,448,551	52.74
Coal	6,105,799	22.29
Class II.—Continued.		
Iron ore	7,677,107	28.02
Stone (all kinds)	311,015	1.14
Salt	296,513	1.08
Other products of mines and quarries	58,117	0.21
Class III.—Other products	6,921,985	25.27
Animal products	64,728	0.24
Lumber	6,857,257	25.03
Class IV.—Manufactures, miscellaneous merchandise, and other commodities.	1,518,220	5.54

TRAFFIC OPERATIONS—Continued.

TABLE 17.—PASSENGER TRAFFIC—PASSENGER MOVEMENT ON ALL THE LAKES AND ST. LAWRENCE RIVER, THE ENTRIES ACCREDITED TO THE PRINCIPAL PORTS AND DIVIDED INTO THE CLASSES OF REGULAR, EXCURSION, AND FERRY PASSENGERS.

LAKES AND RIVER.	Total.	Regular.	Excursion.	Ferry.
Total	2, 235, 993	775, 871	836, 648	623, 474
Lake Superior	155, 609	78, 131	8, 407	69, 071
Duluth	7, 010		7, 010	
Marquette	148, 599	78, 131	1, 397	69, 071
Lake Huron	755, 516	315, 120	189, 468	250, 928
Detroit	406, 317	233, 196	173, 121	
Port Huron	349, 199	81, 924	16, 347	250, 928
Lake Michigan	506, 696	197, 458	123, 230	186, 008
Chicago	110, 093	11, 182	56, 511	42, 400
Grand Haven	329, 870	177, 302	8, 960	143, 608
Milwaukee	66, 733	8, 974	57, 759	
Lake Erie	598, 885	114, 768	369, 924	114, 193
Buffalo	122, 419	35, 399	46, 738	40, 282
Erie	43, 815	21, 355	22, 460	
Sandusky	173, 696	57, 260	43, 530	72, 906
Suspension Bridge	1, 909	754	150	1, 005
Toledo	257, 046		257, 046	
Lake Ontario	129, 296	66, 840	62, 456	
Cape Vincent	50, 467	45, 422	5, 045	
Oswego	31, 540	2, 000	29, 540	
Rochester	47, 289	19, 418	27, 871	
St. Lawrence river	89, 991	3, 554	83, 163	3, 274
Alexandria Bay	12, 600		12, 600	
Clayton	446		446	
Ogdensburg	76, 945	3, 554	70, 117	3, 274

TABLE 18.—FREIGHT VALUES—STATEMENT SHOWING ESTIMATED VALUE OF THE LAKE FREIGHT COMPUTED ON THE BASIS OF CARGO TONNAGE IN TABLE 16.

COMMODITIES.	Number of tons.	Estimated value per ton.	Estimated value of total tons.
Total	27, 394, 767	$13. 12	$359, 482, 437
Wheat	969, 150	32. 67	31, 662, 131
Corn	1, 929, 614	15. 00	28, 944, 210
Other grain	503, 117	39. 22	19, 732, 249
Mill products	992, 066	50. 00	49, 603, 300
All other farm products	112. 064	89. 79	10, 062, 215
Coal	6, 105, 799	3. 50	21, 370, 297
Iron ore	7, 677, 107	3. 05	23, 415, 176
Stone	311, 015	$10. 00	$3, 110, 150
Salt	296, 513	10. 00	2, 965, 130
Other products of mines and quarries.	58, 117	155. 38	9, 030, 140
Animal products	64, 728	100. 00	6, 472, 800
Lumber	6, 857, 257	10. 30	70, 629, 747
Manufactures, miscellaneous merchandise, and other commodities. (*a*)	1, 518, 220	54. 33	82, 484, 892

a Not including the unclassified merchandise given in Table 15.

EARNINGS AND EXPENSE ACCOUNTS.

TABLE **19.**—FINANCIAL ACCOUNT IN GENERAL—GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF 1,841 REPORTING (*a*) CRAFT GIVEN SEPARATELY BY STEAMERS, SAILING VESSELS, AND UNRIGGED, AND ENTERED FOR EACH PORT AND EACH LAKE.

PORTS.	Gross earnings.	Expenses.	Net earnings.
ALL CRAFT.			
Total	$24, 369, 895	$19, 443, 241	$4, 926, 654
Lake Superior	1, 197, 586	1, 029, 151	168, 435
Duluth	92, 181	77, 585	14, 596
Marquette	1, 105, 405	951, 566	153, 839
Lake Huron	6, 955, 133	5, 349, 465	1, 605, 668
Detroit	3, 792, 600	2, 812, 931	979, 669
Port Huron	3, 162, 533	2, 536, 534	625, 999
Lake Michigan	5, 826, 148	4, 843, 159	982, 989
Chicago	2, 111, 312	1, 844, 654	266, 658
Grand Haven	1, 316, 530	1, 127, 899	188, 631
Milwaukee	2, 398, 306	1, 870, 606	527, 700
Lake Erie	9, 649, 090	7, 621, 541	2, 027, 549
Buffalo	2, 785, 853	2, 194, 577	591, 276
Cleveland	4, 344, 697	3, 441, 929	902, 768
Erie	886, 634	719. 905	166, 729
Sandusky	868, 840	683, 054	185, 786
Suspension Bridge	200, 321	166, 026	34, 295
Toledo	562, 745	416, 050	146, 695
Lake Ontario	335, 483	302, 658	32, 825
Cape Vincent	104, 713	88, 069	16, 644
Oswego	133, 255	127. 157	6, 098
Rochester	97, 515	87, 432	10, 083
St. Lawrence river	406, 455	297, 267	109, 188
Alexandria Bay	12, 197	8, 612	3, 585
Clayton	1, 100	634	466
Ogdensburg	393, 158	288, 021	105, 137
STEAMERS.			
Total	17, 808, 329	13, 861, 485	3, 946, 844
Lake Superior	962, 150	825, 688	136, 462
Duluth	92, 181	77, 585	14, 596
Marquette	869, 969	748, 103	121, 866
Lake Huron	4, 786, 548	3, 562, 734	1, 223, 814
Detroit	2, 945, 129	2, 129, 772	815, 357
Port Huron	1, 841, 419	1, 432, 962	408, 457
Lake Michigan	4, 122, 479	3, 376, 135	746, 344
Chicago	1, 381, 698	1, 213, 766	167, 932
Grand Haven	964, 301	810, 518	153, 783
Milwaukee	1, 776, 480	1, 351, 851	424, 629
Lake Erie	7, 461, 563	5, 732, 426	1, 729, 137
Buffalo	2, 368, 184	1, 834, 458	533, 726
Cleveland	3, 215, 855	2, 449, 910	765, 945
Erie	867, 716	705, 925	161, 791
Sandusky	522, 314	398, 295	124, 019
Suspension Bridge	116, 130	93, 165	22, 965
Toledo	371, 364	250. 673	120, 691
STEAMERS—Continued.			
Lake Ontario	$140, 339	$129, 829	$10, 510
Cape Vincent	56, 843	50, 310	6, 533
Oswego	35, 235	33, 703	1, 532
Rochester	48, 261	45, 816	2, 445
St. Lawrence river	335, 250	234, 673	100, 577
Alexandria Bay	12, 197	8, 612	3, 585
Clayton	1, 100	634	466
Ogdensburg	321, 953	225, 427	96, 526
SAILING VESSELS.			
Total	6, 480, 424	5, 513, 536	966, 888
Lake Superior	216, 729	189, 636	27, 093
Duluth			
Marquette	216, 729	189, 636	27, 093
Lake Huron	2, 168, 585	1, 786, 731	381, 854
Detroit	847, 471	683, 159	164, 312
Port Huron	1, 321, 114	1, 103, 572	217, 542
Lake Michigan	1, 703, 669	1, 467, 024	236, 645
Chicago	729, 614	630, 888	98, 726
Grand Haven	352, 229	317, 381	34, 848
Milwaukee	621, 826	518, 755	103, 071
Lake Erie	2, 179, 345	1, 881, 899	297, 446
Buffalo	409, 487	352, 903	56, 584
Cleveland	1, 128, 842	992, 019	136, 823
Erie	18, 918	13, 980	4, 938
Sandusky	346, 526	284, 759	61, 767
Suspension Bridge	84, 191	72, 861	11, 330
Toledo	191, 381	165, 377	26, 004
Lake Ontario	195, 144	172, 829	22, 315
Cape Vincent	47, 870	37, 759	10, 111
Oswego	98, 020	93, 454	4, 566
Rochester	49, 254	41, 616	7, 638
St. Lawrence river	16, 952	15, 417	1, 535
Alexandria Bay			
Clayton			
Ogdensburg	16, 952	15, 417	1, 535
UNRIGGED.			
Total	81, 142	68, 220	12, 922
Lake Superior: Marquette	18, 707	13, 827	4, 880
Lake Erie: Buffalo	8, 182	7, 216	966
St. Lawrence river: Ogdensburg	54, 253	47, 177	7, 076

a Steamers, 1,072; sailing vessels, 758; unrigged, 11. See supplementary table below.

SUPPLEMENTARY—ESTIMATED GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF 896 CRAFT NOT REPORTING THESE ITEMS, THE ESTIMATE BEING BASED ON THE FIGURES ACTUALLY REPORTED FOR 1,841 CRAFT.

CLASS OF VESSELS.	Number of vessels.	Gross earnings.	Expenses.	Net earnings.
Total	896	$11, 093, 957	$8, 448, 811	$2, 645, 146
Steamers	395	7, 140, 938	5, 107, 627	2, 033, 311
Sailing vessels	204	$1, 760, 221	$1, 497, 593	$262, 628
Unrigged	297	2, 192, 798	1, 843, 591	349, 207

EARNINGS AND EXPENSE ACCOUNTS—Continued.

Table 20.—EXPENSE ACCOUNT IN DETAIL—ITEMIZED EXPENSE ACCOUNT OF 1,841 REPORTING (*a*) CRAFT, GIVEN SEPARATELY, FOR STEAMERS, SAILING VESSELS, AND UNRIGGED, SUBDIVIDED INTO THE VARIOUS ITEMS CONSTITUTING THE RUNNING AND SHORE EXPENSES.

ALL CRAFT.

LAKES AND RIVER.	Class.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel for the steamers.
Total	All classes	$19, 443, 241	$895, 140	$5, 676, 802	$1, 322, 925	$1, 681, 694	$2, 975, 915
Great Lakes and St. Lawrence river	Steam	13, 861, 485	412, 193	4, 235, 980	990, 678	1, 158, 494	2, 975, 915
	Sail	5, 513, 536	465, 248	1, 422, 957	328, 207	522, 557	....
	Unrigged	68, 220	17, 699	17, 865	4, 040	643	....
Lake Superior	All classes	1, 029, 151	67, 771	322, 173	80, 209	76, 515	200, 405
	Steam	825, 688	40, 450	279, 093	66, 671	57, 364	200, 405
	Sail	189, 636	24, 189	40, 307	12, 678	18, 849	....
	Unrigged	13, 827	3, 132	2, 773	860	302	....
Duluth	Steam	77, 585	2	32, 149	6, 537	7, 995	15, 061
Marquette	All classes	951, 566	67, 769	290, 024	73, 672	68, 520	185, 344
	Steam	748, 103	40, 448	246, 944	60, 134	49, 369	185, 344
	Sail	189, 636	24, 189	40, 307	12, 678	18, 849	....
	Unrigged	13, 827	3, 132	2, 773	860	302	....
Lake Huron	All classes	5, 349, 465	346, 364	1, 475, 828	363, 117	527, 793	745, 130
	Steam	3, 562, 734	124, 394	1, 105, 881	271, 668	348, 815	745, 130
	Sail	1, 786, 731	221, 970	369, 947	91, 449	178, 978	....
Detroit	All classes	2, 812, 931	67, 949	766, 335	201, 964	307, 339	411, 078
	Steam	2, 129, 772	38, 091	626, 589	169, 535	248, 556	411, 078
	Sail	683, 159	29, 858	139, 746	32, 429	58, 783	....
Port Huron	All classes	2, 536, 534	278, 415	709, 493	161, 153	220, 454	334, 052
	Steam	1, 432, 962	86, 303	479, 292	102, 133	100, 259	334, 052
	Sail	1, 103, 572	192, 112	230, 201	59, 020	120, 195	....
Lake Michigan	All classes	4, 843, 159	312, 993	1, 666, 268	366, 462	426, 488	625, 071
	Steam	3, 376, 135	169, 067	1, 140, 815	256, 676	253, 580	625, 071
	Sail	1, 467, 024	143, 926	525, 453	109, 786	172, 908	....
Chicago	All classes	1, 844, 654	87, 047	667, 549	140, 394	162, 602	227, 702
	Steam	1, 213, 766	31, 262	446, 404	94, 397	82, 289	227, 702
	Sail	630, 888	55, 785	221, 145	45, 997	80, 313	....
Grand Haven	All classes	1, 127, 899	60, 315	424, 532	92, 245	95, 430	148, 405
	Steam	810, 518	21, 875	305, 414	65, 822	66, 611	148, 405
	Sail	317, 381	38, 440	119, 118	26, 423	28, 819	....
Milwaukee	All classes	1, 870, 606	165, 631	574, 187	133, 823	168, 456	248, 964
	Steam	1, 351, 851	115, 930	388, 997	96, 457	104, 680	248, 964
	Sail	518, 755	49, 701	185, 190	37, 366	63, 776	....
Lake Erie	All classes	7, 621, 541	125, 324	2, 021, 736	461, 289	621, 563	1, 333, 833
	Steam	5, 732, 426	59, 450	1, 591, 422	368, 247	478, 706	1, 333, 833
	Sail	1, 881, 899	65, 874	423, 148	93, 042	142, 807	....
	Unrigged	7, 216	....	7, 166	....	50	....
Buffalo	All classes	2, 194, 577	29, 766	611, 058	142, 982	166, 848	528, 315
	Steam	1, 834, 458	20, 292	533, 468	127, 336	148, 119	528, 315
	Sail	352, 903	9, 474	70, 424	15, 646	18, 679	....
	Unrigged	7, 216	....	7, 166	....	50	....
Cleveland	All classes	3, 441, 929	38, 919	875, 722	179, 694	298, 118	498, 948
	Steam	2, 449, 910	14, 960	652, 146	131, 313	218, 854	498, 948
	Sail	992, 019	23, 959	223, 576	48, 381	79, 264	....
Erie	All classes	719, 905	2, 941	176, 716	49, 445	67, 877	145, 258
	Steam	705, 925	4	174, 087	48, 821	67, 103	145, 258
	Sail	13, 980	2, 937	2, 629	624	774	....
Sandusky	All classes	683, 054	40, 608	196, 222	49, 689	42, 306	90, 652
	Steam	398, 295	20, 132	127, 533	33, 528	19, 006	90, 652
	Sail	284, 759	20, 476	68, 689	16, 161	23, 300	....
Suspension Bridge	All classes	166, 026	21	37, 905	10, 743	15, 581	23, 612
	Steam	93, 165	5	26, 355	7, 415	11, 199	23, 612
	Sail	72, 861	16	11, 550	3, 328	4, 382	....
Toledo	All classes	416, 050	13, 069	124, 113	28, 736	30, 833	47, 048
	Steam	250, 673	4, 057	77. 833	19, 834	14, 425	47, 048
	Sail	165, 377	9, 012	46, 280	8, 902	16, 408	....

a Steamers, 1,072; sailing vessels, 758; unrigged, 11. See supplementary table, page 105.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL, ETC.—Continued.

ALL CRAFT—Continued.

LAKES AND RIVER.	Class.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel for the steamers.
Lake Ontario	All classes	$302, 658	$10, 071	$122, 204	$32, 931	$19, 019	$24, 818
	Steam	129, 829	800	61, 991	13, 599	10, 704	24, 818
	Sail	172, 829	9, 271	60, 213	19, 332	8, 315	...
Cape Vincent	All classes	88, 069	3, 203	37, 421	17, 065	5, 147	11, 724
	Steam	50, 310	290	21, 485	7, 624	3, 812	11, 724
	Sail	37, 759	2, 913	15, 936	9, 441	1, 335	...
Oswego	All classes	127, 157	6, 308	46, 012	9, 550	8, 383	6, 083
	Steam	33, 703	...	16, 726	2, 979	2, 207	6, 083
	Sail	93, 454	6, 308	29, 286	6, 571	6, 176	...
Rochester	All classes	87, 432	560	38, 771	6, 316	5, 489	7, 011
	Steam	45, 816	510	23, 780	2, 996	4, 685	7, 011
	Sail	41, 616	50	14, 991	3, 320	804	...
St. Lawrence river	All classes	297, 267	32, 617	68, 593	18, 917	10, 316	46, 658
	Steam	234, 673	18, 032	56, 778	13, 817	9, 325	46, 658
	Sail	15, 417	18	3, 889	1, 920	700	...
	Unrigged	47, 177	14, 567	7, 926	3, 180	291	...
Alexandria Bay	Steam	8, 612	206	3, 466	300	450	2. 242
Clayton	Steam	634	...	540	...	...	75
Ogdensburg	All classes	288, 021	32, 411	64, 587	18, 617	9, 866	44, 341
	Steam	225, 427	17, 826	52, 772	13, 517	8, 875	44, 341
	Sail	15, 417	18	3, 889	1, 920	700	...
	Unrigged	47, 177	14, 567	7, 926	3, 180	291	...

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL, ETC.—Continued.

ALL CRAFT—Continued.

LAKES AND RIVER.	Class.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Total	All classes	$4, 353, 323	$158, 863	$885, 303	$138, 773	$235, 085	$1, 119, 418
Great Lakes and St. Lawrence river	Steam	2, 266, 582	105, 079	679, 453	108, 733	235, 085	693, 293
	Sail	2, 062, 546	53, 274	203, 632	29, 990		425, 125
	Unrigged	24, 195	510	2, 218	50		1, 000
Lake Superior	All classes	216, 176	1, 125	33, 066	4, 653	7, 993	19, 065
	Steam	131, 829	896	27, 852	3, 946	7, 993	9, 189
	Sail	77, 667	199	5, 214	657		9, 876
	Unrigged	6, 680	30		50		
Duluth	Steam	9, 583		1, 660	649	3, 939	10
Marquette	All classes	206, 593	1, 125	31, 406	4, 004	4, 054	19, 055
	Steam	122, 246	896	26, 192	3. 297	4, 054	9, 179
	Sail	77, 667	199	5, 214	657		9, 876
	Unrigged	6, 680	30		50		
Lake Huron	All classes	1, 184, 879	30, 439	267, 757	42, 139	74, 911	291, 108
	Steam	460, 967	16, 581	197, 838	33, 914	74, 911	182, 635
	Sail	723, 912	13, 858	69, 919	8, 225		108, 473
Detroit	All classes	572, 104	15, 873	162, 817	25, 713	59, 079	222, 680
	Steam	276, 308	7, 902	126, 847	21, 749	59, 079	144, 038
	Sail	295, 796	7, 971	35, 970	3, 964		78, 642
Port Huron	All classes	612, 775	14, 566	104, 940	16, 426	15, 832	68, 428
	Steam	184, 659	8, 679	70, 991	12, 165	15, 832	38, 597
	Sail	428, 116	5, 887	33, 949	4, 261		29, 831
Lake Michigan	All classes	888, 508	69, 743	181, 787	33, 500	80, 828	191, 511
	Steam	501, 236	61, 652	154, 086	27, 840	80, 828	105, 284
	Sail	387, 272	8, 091	27, 701	5, 660		86, 227
Chicago	All classes	337, 904	49, 272	61, 793	5, 566	22, 563	82, 262
	Steam	180, 794	43, 943	38, 793	3, 845	22, 563	41, 774
	Sail	157, 110	5, 329	23, 000	1, 721		40, 488
Grand Haven	All classes	201, 737	3, 048	32, 357	8, 990	17, 140	43, 700
	Steam	113, 850	1, 710	32, 267	7, 371	17, 140	30, 053
	Sail	87, 887	1, 338	90	1, 619		13, 647
Milwaukee	All classes	348, 867	17, 423	87, 637	18, 944	41, 125	65, 549
	Steam	206, 592	15, 999	83, 026	16, 624	41, 125	33, 457
	Sail	142, 275	1, 424	4, 611	2, 320		32, 092
Lake Erie	All classes	1, 917, 147	49, 181	369, 298	57, 239	67, 408	597, 523
	Steam	1, 103, 575	19, 962	277, 325	41, 831	67, 408	390, 667
	Sail	813, 572	29, 219	91, 973	15, 408		206, 856
	Unrigged						
Buffalo	All classes	495, 959	7, 936	74, 452	1, 005	8, 495	127, 761
	Steam	329, 542	4, 185	53, 966	580	8, 495	80, 160
	Sail	166, 417	3, 751	20, 486	425		47, 601
	Unrigged						
Cleveland	All classes	904, 218	30, 086	239, 467	45, 364	43, 176	288. 217
	Steam	521, 452	11, 685	182, 141	34, 383	43, 176	140, 852
	Sail	382, 766	18, 401	57, 326	10, 981		147, 365
Erie	All classes	114, 313	211	3, 099			160, 045
	Steam	107, 297	211	3, 099			160, 045
	Sail	7, 016					
Sandusky	All classes	207, 647	6, 835	31, 753	6, 993	3, 508	6, 841
	Steam	71, 419	2, 563	21, 915	4, 503	3, 508	3, 536
	Sail	136, 228	4, 272	9, 838	2, 490		3, 305
Suspension Bridge	All classes	71, 394	410	1, 600	25	805	3, 930
	Steam	19, 239	160	1, 600	25	805	2, 750
	Sail	52, 155	250				1, 180
Toledo	All classes	123, 616	3, 703	18, 927	3, 852	11, 424	10, 729
	Steam	54, 626	1, 158	14, 604	2, 340	11, 424	3, 324
	Sail	68, 990	2, 545	4, 323	1, 512		7, 405

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL, ETC.—Continued.

ALL CRAFT—Continued.

LAKES AND RIVER.	Class.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Lake Ontario	All classes	$60, 235	$3, 543	$11, 681	$694	$933	$16, 529
	Steam	8, 302	1, 636	3. 556	654	933	2, 836
	Sail	51, 933	1, 907	8, 125	40		13, 693
Cape Vincent	All classes	9, 481	873	1. 905	215	583	452
	Steam	2, 935	518	937	200	583	202
	Sail	6, 546	355	968	15		250
Oswego	All classes	30. 202	2, 403	7, 460	33		10, 723
	Steam	1, 581	1, 115	1, 420	8		1, 584
	Sail	28, 621	1, 288	6, 040	25		9, 139
Rochester	All classes	20, 552	267	2, 316	446	350	5, 354
	Steam	3, 786	3	1, 199	446	350	1, 050
	Sail	16, 766	264	1, 117			4, 304
St. Lawrence river	All classes	86, 378	4, 832	21, 714	548	3, 012	3, 682
	Steam	60, 673	4, 352	18, 796	548	3, 012	2, 682
	Sail	8, 190		700			
	Unrigged	17, 515	480	2, 218			1, 000
Alexandria Bay	Steam	1, 948					
Clayton	Steam	19					
Ogdensburg	All classes	84, 411	4, 832	21, 714	548	3, 012	3, 682
	Steam	58, 706	4, 352	18, 796	548	3, 012	2, 682
	Sail	8, 190		700			
	Unrigged	17, 515	480	2, 218			1, 000

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL, ETC.—Continued.

STEAMERS.

LAKES AND RIVER.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel.
Total	$13, 861, 485	$412, 193	$4, 235, 980	$990, 678	$1, 158, 494	$2, 975, 915
Lake Superior	825, 688	40, 450	279, 093	66, 671	57, 364	200, 405
Duluth	77, 585	2	32, 149	6, 537	7, 995	15, 061
Marquette	748, 103	40, 448	246, 944	60, 134	49, 369	185, 344
Lake Huron	3, 562, 734	124, 394	1, 105, 881	271, 668	348, 815	745, 130
Detroit	2, 129, 772	38, 091	626, 589	169, 535	248, 556	411, 078
Port Huron	1, 432, 962	86, 303	479, 292	102, 133	100, 259	334, 052
Lake Michigan	3, 376, 135	169, 067	1, 140, 815	256, 676	253, 580	625, 071
Chicago	1, 213, 766	31, 262	446, 404	94, 397	82, 289	227, 702
Grand Haven	810, 518	21, 875	305, 414	65, 822	66, 611	148, 405
Milwaukee	1, 351, 851	115, 930	388, 997	96, 457	104, 680	248, 964
Lake Erie	5, 732, 426	59, 450	1, 591, 422	368, 247	478, 706	1, 333, 833
Buffalo	1, 834, 458	20, 292	533, 468	127, 336	148, 119	528, 315
Cleveland	2, 449, 910	14. 960	652, 146	131, 313	218, 854	498, 948
Erie	705, 925	4	174, 087	48, 821	67, 103	145, 258
Sandusky	398, 295	20, 132	127, 533	33, 528	19, 006	90, 652
Suspension Bridge	93, 165	5	26, 355	7, 415	11, 199	23, 612
Toledo	250, 673	4, 057	77, 833	19, 834	14, 425	47, 048
Lake Ontario	129, 829	800	61, 991	13, 599	10, 704	24, 818
Cape Vincent	50, 310	290	21, 485	7, 624	3, 812	11, 724
Oswego	33, 703		16, 726	2, 979	2, 207	6, 083
Rochester	45, 816	510	23, 780	2, 996	4, 685	7, 011
St. Lawrence river	234, 673	18, 032	56, 778	13, 817	9, 325	46, 658
Alexandria Bay	8, 612	206	3, 466	300	450	2, 242
Clayton	634		540			75
Ogdensburg	225, 427	17, 826	52, 772	13, 517	8, 875	44, 341

LAKES AND RIVER.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Total	$2, 266, 582	$105, 079	$679, 453	$108, 733	$235, 085	$693, 293
Lake Superior	131, 829	896	27, 852	3, 946	7, 993	9, 189
Duluth	9, 583		1, 660	649	3, 939	10
Marquette	122, 246	896	26, 192	3, 297	4, 054	9, 179
Lake Huron	460, 967	16, 581	197, 838	33, 914	74, 911	182, 635
Detroit	276, 308	7, 902	126, 847	21, 749	59, 079	144, 038
Port Huron	184, 659	8, 679	70, 991	12, 165	15, 832	38, 597
Lake Michigan	501, 236	61, 652	154, 086	27, 840	80, 828	105, 284
Chicago	180, 794	43, 943	38, 793	3, 845	22, 563	41, 774
Grand Haven	113, 850	1, 710	32, 267	7, 371	17, 140	30, 053
Milwaukee	206, 592	15, 999	83, 026	16, 624	41, 125	33, 457
Lake Erie	1, 103, 575	19, 962	277, 325	41, 831	67, 408	390, 667
Buffalo	329, 542	4, 185	53, 966	580	8, 495	80, 160
Cleveland	521, 452	11, 685	182, 141	34, 383	43, 176	140, 852
Erie	107, 297	211	3, 099			160, 045
Sandusky	71, 419	2, 563	21, 915	4, 503	3, 508	3, 536
Suspension Bridge	19, 239	160	1, 600	25	805	2, 750
Toledo	54, 626	1, 158	14, 604	2, 340	11, 424	3, 324
Lake Ontario	8, 302	1, 636	3, 556	654	933	2, 836
Cape Vincent	2, 935	518	937	200	583	202
Oswego	1, 581	1, 115	1, 420	8		1, 584
Rochester	3, 786	3	1, 199	446	350	1, 050
St. Lawrence river	60, 673	4, 352	18, 796	548	3, 012	2, 682
Alexandria Bay	1, 948					
Clayton	19					
Ogdensburg	58, 706	4, 352	18, 796	548	3, 012	2, 682

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL, ETC.—Continued.

SAILING VESSELS.

LAKES AND RIVER.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel.
Total	$5,513,536	$465,248	$1,422,957	$328,207	$522,557	....
Lake Superior	189,636	24,189	40,307	12,678	18,849	....
Duluth	....	....	....	....	....	....
Marquette	189.636	24,189	40,307	12,678	18,849	....
Lake Huron	1,786,731	221,970	369,947	91,449	178,978	....
Detroit	683,159	29,858	139,746	32,429	58,783	....
Port Huron	1,103,572	192,112	230,201	59,020	120,195	....
Lake Michigan	1,467,024	143,926	525,453	109,786	172,908	....
Chicago	630,888	55,785	221,145	45,997	80,313	....
Grand Haven	317,381	38,440	119,118	26,423	28,819	....
Milwaukee	518,755	49,701	185,190	37,366	63,776	....
Lake Erie	1,881,899	65,874	423,148	93,042	142,807	....
Buffalo	352,903	9,474	70,424	15,646	18,679	....
Cleveland	992,019	23,959	223,576	48,381	79,264	....
Erie	13,980	2,937	2,629	624	774	....
Sandusky	284,759	20,476	68,689	16,161	23,300	....
Suspension Bridge	72,861	16	11,550	3,328	4,382	....
Toledo	165,377	9,012	46,280	8,902	16,408	....
Lake Ontario	172,829	9,271	60,213	19,332	8,315	....
Cape Vincent	37,759	2,913	15,936	9,441	1,335	....
Oswego	93,454	6,308	29,286	6,571	6,176	....
Rochester	41,616	50	14,991	3,320	804	....
St. Lawrence river	15,417	18	3,889	1,920	700	....
Alexandria Bay	....	....	....	....	....	....
Clayton	....	....	....	....	....	....
Ogdensburg	15,417	18	3,889	1,920	700	....

LAKES AND RIVER.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Total	$2,062,546	$53,274	$203,632	$29,990	....	$425,125
Lake Superior	77,667	199	5,214	657	....	9,876
Duluth	....	....	....	....	....	....
Marquette	77,667	199	5,214	657	....	9,876
Lake Huron	723,912	13,858	69,919	8,225	....	108,473
Detroit	295,796	7,971	35,970	3,964	....	78,642
Port Huron	428,116	5,887	33,949	4,261	....	29,831
Lake Michigan	387,272	8,091	27,701	5,660	....	86,227
Chicago	157,110	5,329	23,000	1,721	....	40,488
Grand Haven	87,887	1,338	90	1,619	....	13,647
Milwaukee	142,275	1,424	4,611	2,320	....	32,092
Lake Erie	813,572	29,219	91,973	15,408	....	206,856
Buffalo	166,417	3,751	20,486	425	....	47,601
Cleveland	382,766	18,401	57,326	10,981	....	147,365
Erie	7,016	....	....	....	....	....
Sandusky	136,228	4,272	9,838	2,490	....	3,305
Suspension Bridge	52,155	250	....	....	....	1,180
Toledo	68,990	2,545	4,323	1,512	....	7,405
Lake Ontario	51,933	1,907	8,125	40	....	13,693
Cape Vincent	6,546	355	968	15	....	250
Oswego	28,621	1,288	6,040	25	....	9,139
Rochester	16,766	264	1,117	....	....	4,304
St. Lawrence river	8,190	....	700	....	....	....
Alexandria Bay	....	....	....	....	....	....
Clayton	....	....	....	....	....	....
Ogdensburg	8,190	....	700	....	....	....

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 20.—EXPENSE ACCOUNT IN DETAIL, ETC.—Continued.

UNRIGGED.

LAKES AND RIVER.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel.
Total	$68, 220	$17, 699	$17, 865	$4, 040	$643	
Lake Superior:						
Marquette	13, 827	3, 132	2, 773	860	302	
Lake Erie:						
Buffalo	7, 216		7, 166		50	
St. Lawrence river:						
Ogdensburg	47, 177	14, 567	7, 926	3, 180	291	

LAKES AND RIVER.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Total	$24, 195	$510	$2, 218	$50		$1, 000
Lake Superior:						
Marquette	6, 680	30		50		
Lake Erie:						
Buffalo						
St. Lawrence river:						
Ogdensburg	17, 515	480	2, 218			1, 000

SUPPLEMENTARY—ESTIMATED ITEMIZED EXPENSE ACCOUNT OF 896 CRAFT NOT REPORTING THESE DETAILS, THE ESTIMATE BEING BASED ON THE FIGURES ACTUALLY REPORTED FOR 1,841 CRAFT.

CLASS OF VESSELS.	Number of vessels.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel.
Total	896	$8, 448, 811	$755, 952	$2, 421, 389	$562, 378	$584, 233	$1, 096, 536
Steamers	395	5, 107. 627	151. 881	1. 560, 915	365, 035	426. 869	1, 096, 536
Sailing vessels	204	1. 497, 593	124, 589	381, 046	87. 897	139, 946	
Unrigged	297	1, 843, 591	479, 482	479, 428	109, 446	17, 418	

CLASS OF VESSELS.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Total	$2. 043. 005	$66, 800	$364. 982	$70, 511	$86, 623	$396, 402
Steamers	835. 168	38. 718	250, 359	40, 065	86, 623	255, 458
Sailing vessels	552. 371	14, 267	54, 534	29, 090		113, 853
Unrigged	655. 466	13, 815	60. 089	1, 356		27, 091

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 21.—EMPLOYÉS AND WAGES BY PORTS—MONTHLY WAGES PAID TO ALL EMPLOYÉS OF 1,841 REPORTING (*a*) CRAFT, WITH SEPARATE ENTRIES FOR STEAMERS, SAILING VESSELS, AND UNRIGGED, GIVEN IN DETAIL.

STEAMERS.

PORTS.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	1,069	$116,678	577	$41,289	339	$19,663	117	$7,751	1,067	$93,193	597	$37,159	1,040	$37,452	565	$19,078
Superior	90	9,156	33	2,178	12	722	6	310	94	7,976	39	2,350	51	1,800	18	577
Duluth	20	1,620	1	50	......	....	......	....	24	1,810	1	40	1	50	......	....
Marquette	70	7,536	32	2,128	12	722	6	310	70	6,166	38	2,310	50	1,750	18	577
Huron	250	27,607	180	12,468	82	4,591	40	2,644	249	22,402	178	11,277	323	10,841	155	5,215
Detroit	113	13,551	91	6,409	49	2,861	30	2,049	113	10,947	88	5,749	163	5,619	93	3,229
Port Huron	137	14,056	89	6,059	33	1,730	10	595	136	11,455	90	5,528	160	5,222	62	1,986
Michigan	323	33,067	141	9,575	68	3,869	42	2,890	327	27,010	156	9,193	239	8,842	85	2,823
Chicago	112	13,184	39	2,858	21	1,195	10	990	114	10,353	51	3,010	69	2,741	27	891
Grand Haven	115	9,430	42	2,570	14	720	23	1,210	116	8,395	43	2,253	75	2,555	15	486
Milwaukee	96	10,453	60	4,147	33	1,954	9	690	97	8,262	62	3,930	95	3,546	43	1,446
Erie	338	41,347	205	15,988	170	10,086	19	1,411	330	31,023	204	13,248	394	14,670	291	9,968
Buffalo	126	14,203	69	5,581	58	3,539	5	461	120	11,060	66	3,952	129	4,690	114	3,663
Cleveland	119	17,138	81	6,296	73	4,242	......	....	119	11,889	83	5,661	164	6,499	101	3,874
Erie	24	3,238	18	1,468	17	1,052	4	300	24	2,415	17	1,195	35	1,215	34	1,020
Sandusky	38	3,659	21	1,465	13	736	7	495	36	3,086	22	1,440	40	1,392	19	672
Suspension Bridge	6	738	4	300	3	160	2	80	6	528	4	265	8	240	8	240
Toledo	25	2,371	12	878	6	357	1	75	25	2,045	12	735	18	634	15	499
Ontario	46	3,471	8	390	1	35	8	406	46	3,182	11	526	18	775	6	185
Cape Vincent	19	1,505	5	210	1	35	4	165	20	1,436	4	190	6	220	2	60
Oswego	14	976	......	....	......	....	1	45	13	886	3	136	2	125	1	30
Rochester	13	990	3	180	......	....	3	196	13	860	4	200	10	430	3	95
St. Lawrence river	22	2,030	10	690	6	360	2	90	21	1,600	9	565	15	524	10	310
Alexandria Bay	3	240	......	....	......	....	1	60	3	240	......	....	1	35	......	....
Clayton	1	60	......	....	......	....	......	....	1	60	......	....	......	....	......	....
Ogdensburg	18	1,730	10	690	6	360	1	30	17	1,300	9	565	14	489	10	310

a 1,072 steamers; 758 sailing vessels; 11 unrigged. See supplementary table, page 110.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 21.—EMPLOYÉS AND WAGES BY PORTS, ETC.—Continued

STEAMERS—Continued.

PORTS.	WATCHMEN.		COOKS.		ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	503	$16, 583	720	$37, 106	306	$6, 419	52	$1, 870	2, 278	$53, 992	1, 463	$53, 411	75	$4, 457	215	$4, 395
Superior	25	783	55	2, 552	17	385			133	3, 600	102	3, 702	2	100	7	120
Duluth			11	340					19	835	8	295				
Marquette	25	783	44	2, 212	17	385			114	2, 765	94	3, 407	2	100	7	120
Huron	160	5, 277	204	9, 902	82	1, 482	15	450	569	13, 263	381	13, 392	17	1, 037	83	1, 794
Detroit	90	3, 085	107	5, 215	46	861	15	450	349	8, 573	206	7, 606	14	842	75	1, 634
Port Huron	70	2, 192	97	4, 687	36	621			220	4, 690	175	5, 786	3	195	8	160
Michigan	113	3, 797	217	12, 429	63	1, 351	19	640	574	16, 897	352	13, 529	16	975	44	813
Chicago	39	1, 280	82	5, 841	24	615	10	315	216	6, 906	133	5, 608	8	530	26	514
Grand Haven	25	751	55	2, 621	15	300	2	30	130	3, 452	119	4, 064	6	310	15	245
Milwaukee	49	1, 766	80	3, 967	24	436	7	295	228	6, 539	100	3, 857	2	135	3	54
Erie	191	6, 343	217	11, 228	136	3, 019	13	635	904	17, 806	588	21, 479	37	2, 205	74	1, 564
Buffalo	68	2, 082	56	3, 057	33	808			325	5, 584	247	8, 724	26	1, 660	54	1, 175
Cleveland	65	2, 475	90	4, 846	67	1, 321	6	360	301	6, 736	197	7, 765				
Erie	33	990	17	1, 063	17	585	4	200	117	1, 870	71	2, 505	5	350	13	260
Sandusky	14	474	33	1, 352	11	165			96	2, 256	37	1, 331			1	15
Suspension Bridge			4	240	3	60			12	340	10	323				
Toledo	11	322	17	670	5	80	3	75	53	1, 020	26	831	6	195	6	114
Ontario	7	178	14	467	2	42			62	1, 740	22	693	3	140	7	104
Cape Vincent	5	108	8	312	2	42			30	790	14	393	3	140	6	84
Oswego	1	40	4	110					12	370	4	130				
Rochester	1	30	2	45					20	580	4	170			1	20
St. Lawrence river	7	205	13	528	6	140	5	145	36	686	18	616				
Alexandria Bay	1	25							3	90	1	40				
Clayton									1	15						
Ogdensburg	6	180	13	528	6	140	5	145	32	581	17	576				

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 21.—EMPLOYÉS AND WAGES BY PORTS, ETC.—Continued.

STEAMERS—Continued.

PORTS.	BOYS.		CHAMBERMAIDS.		PORTERS.		MUSICIANS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	30	$549	49	$1,097	89	$2,245	8	$520	11,159	19,444	$554,907	$49.73
Superior			1	18	6	150			691	1,078	36,479	52.79
Duluth									85	98	5,040	59.29
Marquette			1	18	6	150			606	980	31,439	51.88
Huron	7	129	20	420	17	417			3,012	4,650	144,608	48.01
Detroit	5	99	19	400	16	397			1,682	2,617	79,576	47.31
Port Huron	2	30	1	20	1	20			1,330	2,033	65,032	48.90
Michigan	14	215	15	361	5	121			2,813	5,612	148,397	52.75
Chicago	1	15	8	188	1	20			991	2,101	57,054	57.57
Grand Haven	11	170	2	50	4	101			827	1,603	39,713	48.02
Milwaukee	2	30	5	123					995	1,908	51,630	51.89
Erie	8	195	10	240	61	1,557	8	520	4,198	7,372	204,532	48.72
Buffalo	7	175	5	120	36	917			1,544	1,828	71,451	46.28
Cleveland									1,466	3,728	79,102	53.96
Erie			4	100	20	500			474	524	20,326	42.88
Sandusky	1	20			2	65			391	699	18,623	47.63
Suspension Bridge									70	137	3,514	50.20
Toledo			1	20	3	75	8	520	253	456	11,516	45.52
Ontario	1	10	3	58					265	321	12,402	46.80
Cape Vincent			2	38					131	163	5,728	43.73
Oswego									55	72	2,848	51.78
Rochester	1	10	1	20					79	86	3,826	48.43
St. Lawrence river									180	411	8,489	47.16
Alexandria Bay									13	13	730	56.15
Clayton									3	3	135	45.00
Ogdensburg									164	395	7,624	46.49

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 21.—EMPLOYÉS AND WAGES BY PORTS, ETC.—Continued.

SAILING VESSELS.

PORTS	CAPTAINS.		FIRST MATES.		SECOND MATES.		WATCHMEN.		COOKS.		SEAMEN.		BOYS.		Number of persons making ordinary crew.	Number of persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	757	$58, 426	632	$32, 952	132	$6, 641	2	$50	660	$23, 547	2, 354	$90, 369	4	$73	4, 541	8, 700	$212, 058	$46. 70
Superior:																		
Marquette	25	1. 917	15	900	7	380	...	...	18	720	69	2, 752	...	...	134	363	6, 669	49. 77
Huron	215	15, 116	177	8, 048	14	645	...	...	188	5, 729	672	21, 748	...	...	1, 266	2. 203	51, 286	40. 51
Detroit	70	5. 187	56	2, 832	7	313	...	...	62	1, 894	232	8, 185	...	...	427	629	18, 411	43. 12
Port Huron	145	9. 929	121	5, 216	7	332	...	...	126	3, 835	440	13, 563	...	...	839	1, 574	32, 875	39. 18
Michigan	309	23, 427	257	13, 606	36	1. 939	2	50	269	10, 774	817	35, 437	...	...	1, 690	2. 862	85, 233	50. 43
Chicago	99	8. 828	90	5. 223	22	1, 208	1	30	95	4, 296	365	16, 955	...	...	672	1, 269	36, 540	54. 38
Grand Haven	86	5. 608	62	3, 070	5	244	1	20	70	2, 487	172	7, 054	...	...	396	684	18, 483	46. 67
Milwaukee	124	8, 991	105	5, 313	9	487	...	...	104	3, 991	280	11, 428	...	...	622	909	30, 210	48. 57
Erie	165	15, 235	154	8, 877	70	3, 395	...	...	154	5, 471	671	25, 825	4	73	1, 218	2, 912	58, 876	48. 34
Buffalo	28	2. 458	28	1, 439	4	203	...	...	27	961	118	4, 592	...	...	205	398	9, 653	47. 09
Cleveland	76	7. 629	73	4, 494	51	2, 384	...	...	73	2, 732	320	12, 609	4	73	597	1. 584	29. 921	50. 12
Erie	1	100	1	60	1	51	...	...	1	30	4	120	...	...	8	8	361	45. 13
Sandusky	31	2. 600	24	1, 417	12	664	...	...	25	819	109	4, 454	...	...	201	571	9, 954	49. 52
Suspension Bridge	8	555	7	280	...	...	...	...	7	210	36	1, 070	...	...	58	90	2, 115	36. 47
Toledo	21	1. 893	21	1, 187	2	93	...	...	21	719	84	2, 980	...	...	149	261	6, 872	46. 12
Ontario	40	2. 546	28	1. 471	5	282	...	...	28	811	110	4, 337	...	...	211	294	9. 447	44. 77
Cape Vincent	20	943	10	415	...	...	...	...	10	270	40	1, 341	...	...	80	93	2, 969	37. 11
Oswego	12	993	11	662	4	237	...	...	11	343	43	1, 836	...	...	81	133	4, 071	50. 26
Rochester	8	610	7	394	1	45	...	...	7	198	27	1, 160	...	...	50	68	2, 407	48. 14
St. Lawrence river:																		
Ogdensburg	3	185	1	50	...	...	...	...	3	42	15	270	...	...	22	66	547	24. 86

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 21.—EMPLOYÉS AND WAGES BY PORTS, ETC.—Continued

UNRIGGED.

PORTS.	CAPTAINS.		FIRST MATES.		COOKS.		SEAMEN.		Number of persons making ordinary crew.	Number of persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	11	$695	5	$230	7	$141	38	$1,016	61	151	$2,082	$34.13
Superior:												
Marquette	1	100	1	60	1	50	4	156	7	28	366	52.29
Erie:												
Buffalo	3	230	1	60			10	385	14	14	675	48.21
St. Lawrence river:												
Ogdensburg	7	365	3	110	6	91	24	475	40	109	1,041	26.03

SUPPLEMENTARY—ESTIMATED NUMBER OF EMPLOYÉS AND MONTHLY WAGES PAID ON 896 CRAFT NOT REPORTING THESE DETAILS, THE ESTIMATE BEING BASED ON THE FIGURES ACTUALLY REPORTED FOR 1,841 CRAFT.

CLASS OF VESSELS.	Number of vessels.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.	
		No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	896	895	$77,501	512	$30,035	160	$9,011	43	$2,849	393	$34,325	220	$13,781	385	$13,864	213	$7,199
Steamers	395	394	43,005	213	15,242	125	7,250	43	2,849	393	34,325	220	13,781	385	13,864	213	7,199
Sailing vessels	204	204	15,731	169	8,813	35	1,761										
Unrigged	297	297	18,765	130	5,980												

CLASS OF VESSELS.	WATCHMEN.		COOKS.		ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	152	$5,004	639	$24,128	118	$2,476	1,667	$52,088	850	$20,145	547	$19,971	28	$1,674	79	$1,615
Steamers	151	4,979	271	13,967	118	2,476	19	683	850	20,145	547	19,971	28	1,674	79	1,615
Sailing vessels	1	25	177	6,315			630	24,186								
Unrigged			191	3,846			1,018	27,219								

CLASS OF VESSELS.	BOYS.		CHAMBERMAIDS.		PORTERS.		Number of persons making ordinary crew.	Number of persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	12	$219	19	$421	33	$832	6,965	13,586	$317,138	$45.53
Steamers	11	201	19	421	33	832	4,112	7,165	204,479	49.73
Sailing vessels	1	18					1,217	2,330	56,849	46.71
Unrigged							1,636	4,091	55,810	34.11

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE **22.**—EMPLOYÉS AND WAGES BY LAKE TOTALS—MONTHLY WAGES PAID TO ALL EMPLOYÉS OF 1,841 REPORTING (*a*) CRAFT, WITH SEPARATE ENTRIES FOR STEAMERS, SAILING VESSELS, AND UNRIGGED, BUT GIVEN ONLY IN TOTALS FOR EACH LAKE AND ST. LAWRENCE RIVER.

ALL CRAFT.

LAKES AND RIVER.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	1,837	$175,799	1,214	$74,471	471	$26,304	117	$7,751	1,067	$93,193	597	$37,159	1,040	$37,452	565	$19,078
Superior	116	11,173	49	3,138	19	1,102	6	310	94	7,976	39	2,350	51	1,800	18	577
Huron	465	42,723	357	20,516	96	5,236	40	2,644	249	22,402	178	11,277	323	10,841	155	5,215
Michigan	632	56,494	398	23,181	104	5,808	42	2,890	327	27,010	156	9,193	239	8,842	85	2,823
Erie	506	56,812	360	24,925	240	13,481	19	1,411	330	31,023	204	13,248	394	14.670	291	9,968
Ontario	86	6,017	36	1,861	6	317	8	406	46	3,182	11	526	18	775	6	185
St. Lawrence river	32	2,580	14	850	6	360	2	90	21	1,600	9	565	15	524	10	310

LAKES AND RIVER.	WATCHMEN.		COOKS.		ASSISTANT COOKS		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	505	$16,633	1,387	$60,794	306	$6,419	2,444	$93,255	2,278	$53,992	1,463	$53,411	75	$4,457	215	$4,395
Superior	25	783	74	3,322	17	385	73	2,908	133	3,600	102	3,702	2	100	7	120
Huron	160	5,277	392	15,631	82	1,482	687	22,198	569	13,263	381	13,392	17	1,037	83	1,794
Michigan	115	3,847	486	23,203	63	1,351	836	36,077	574	16,897	352	13,529	16	975	44	813
Erie	191	6,343	371	16,699	136	3,019	694	26,845	904	17,806	588	21,479	37	2.205	74	1,564
Ontario	7	178	42	1,278	2	42	110	4,337	62	1,740	22	693	3	140	7	104
St. Lawrence river	7	205	22	661	6	140	44	890	36	686	18	616				

LAKES AND RIVER.	BOYS.		CHAMBERMAIDS.		PORTERS.		MUSICIANS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	34	$622	49	$1,097	89	$2,245	8	$520	15,761	28,295	$769,047	$48.79
Superior			1	18	6	150			832	1,469	43,514	52.30
Huron	7	129	20	420	17	417			4,278	6,853	195,894	45.79
Michigan	14	215	15	361	5	121			4,503	8,474	233,630	51.88
Erie	12	268	10	240	61	1,557	8	520	5,430	10,298	264,083	48.63
Ontario	1	10	3	58					476	615	21,849	45.90
St. Lawrence river									242	586	10,077	41.64

STEAMERS.

LAKES AND RIVER.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	1,069	$116,678	577	$41,289	339	$19,663	117	$7,751	1,067	$93,193	597	$37,159	1,040	$37,452	565	$19,078
Superior	90	9,156	33	2,178	12	722	6	310	94	7,976	39	2,350	51	1,800	18	577
Huron	250	27,607	180	12,468	82	4,591	40	2,644	249	22,402	178	11,277	323	10,841	155	5,215
Michigan	323	33,067	141	9,575	68	3,869	42	2,890	327	27,010	156	9,193	239	8,842	85	2,823
Erie	338	41,347	205	15,988	170	10,086	19	1,411	330	31,023	204	13,248	394	14,670	291	9,968
Ontario	46	3,471	8	390	1	35	8	406	46	3,182	11	526	18	775	6	185
St. Lawrence river	22	2,030	10	690	6	360	2	90	21	1,600	9	565	15	524	10	310

LAKES AND RIVER.	WATCHMEN.		COOKS.		ASSISTANT COOKS		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	503	$16,583	720	$37,106	306	$6,419	52	$1,870	2.278	$53,992	1,463	$53,411	75	$4,457	215	$4,395
Superior	25	783	55	2,552	17	385			133	3,600	102	3,702	2	100	7	120
Huron	160	5,277	204	9,902	82	1.482	15	450	569	13,263	381	13,392	17	1,037	83	1,794
Michigan	113	3,797	217	12,429	63	1,351	19	640	574	16,897	352	13,529	16	975	44	813
Erie	191	6,343	217	11,228	136	3.019	13	635	904	17.806	588	21,479	37	2,205	74	1,564
Ontario	7	178	14	467	2	42			62	1,740	22	693	3	140	7	104
St. Lawrence river	7	205	13	528	6	140	5	145	36	686	18	616				

a 1,072 steamers; 758 sailing vessels; 11 unrigged. See supplementary table, page 110.

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 22.—EMPLOYÉS AND WAGES BY LAKE TOTALS, ETC.—Continued.

STEAMERS—Continued.

LAKES AND RIVER.	BOYS.		CHAMBERMAIDS.		PORTERS.		MUSICIANS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	30	$549	49	$1,097	89	$2,245	8	$520	11,159	19,444	$554,907	$49.73
Superior			1	18	6	150			691	1,078	36,479	52.79
Huron	7	129	20	420	17	417			3,012	4,650	144,608	48.01
Michigan	14	215	15	361	5	121			2,813	5,612	148,397	52.75
Erie	8	195	10	240	61	1,557	8	520	4,198	7,372	204,532	48.72
Ontario	1	10	3	58					265	321	12,402	46.80
St. Lawrence river									180	411	8,489	47.16

SAILING VESSELS.

LAKES AND RIVER.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	757	$58,426	632	$32,952	132	$6,641										
Superior	25	1,917	15	900	7	380										
Huron	215	15,116	177	8,048	14	645										
Michigan	309	23,427	257	13,606	36	1,939										
Erie	165	15,235	154	8,877	70	3,395										
Ontario	40	2,546	28	1,471	5	282										
St. Lawrence river	3	185	1	50												

LAKES AND RIVER.	WATCHMEN.		COOKS.		ASSISTANT COOKS		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	2	$50	660	$23,547			2,354	$90,369								
Superior			18	720			69	2,752								
Huron			188	5,720			672	21,748								
Michigan	2	50	269	10,774			817	35,437								
Erie			154	5,471			671	25,825								
Ontario			28	811			110	4,337								
St. Lawrence river			3	42			15	270								

LAKES AND RIVER.	BOYS.		CHAMBERMAIDS.		PORTERS.		MUSICIANS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total	4	$73							4,541	8,700	$212,058	$46.70
Superior									134	363	6,669	49.77
Huron									1,266	2,203	51,286	40.51
Michigan									1,690	2,862	85,233	50.43
Erie	4	73							1,218	2,912	58,876	48.34
Ontario									211	294	9,447	44.77
St. Lawrence river									22	66	547	24.86

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 22.—EMPLOYÉS AND WAGES BY LAKE TOTALS, ETC.—Continued.

UNRIGGED.

LAKES AND RIVER.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total	11	$695	5	$230												
Superior	1	100	1	60												
Erie	3	230	1	60												
St. Lawrence river	7	365	3	110												

LAKES AND RIVER.	WATCHMEN.		COOKS.		ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Total			7	$141			38	$1,016								
Superior			1	50			4	156								
Erie							10	385								
St. Lawrence river			6	91			24	475								

LAKES AND RIVER.	BOYS.		CHAMBERMAIDS.		PORTERS.		MUSICIANS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Total									61	151	$2,082	$34.13
Superior									7	28	366	52.29
Erie									14	14	675	48.21
St. Lawrence river									40	109	1,041	26.03

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 23.—FUEL ACCOUNT—AMOUNTS AND VALUE OF THE COAL AND WOOD USED AS FUEL ON 1,072 REPORTING STEAMERS, WITH SEPARATE ENTRIES UNDER THE HEADS OF CLASSIFIED OCCUPATIONS. (*a*)

LAKES AND RIVER.	Tons of coal.	Cords of wood.	Cost of fuel.	PASSENGER, PASSENGER AND FREIGHT, AND FREIGHT.			FERRY.			TOWBOATS.			MISCELLANEOUS.		
				Coal in tons.	Wood in cords.	Value.	Coal in tons.	Wood in cords.	Value.	Coal in tons.	Wood in cords.	Value.	Coal in tons.	Wood in cords.	Value.
Total	1,118,677	62,319	$2,975,915	922.826	31,227	$2,392,310	4.828	2,096	$15.595	160,007	26,036	$475,002	31,016	2,960	$93,008
Lake Superior	67,994	1.100	200,405	48,001	....	138,851	1,127	....	3,546	17,066	1,100	54,020	1.800	....	3,988
Duluth	4,665	800	15,061	150	....	488	....	....	....	4,515	800	14,573	....	....	....
Marquette	63.329	300	185.344	47.851	....	138,363	1,127	....	3,546	12,551	300	39,447	1,800	....	3,988
Lake Huron	324,209	....	745,130	252,666	....	590,833	439	....	1,325	54,509	....	107,731	16,595	....	45,241
Detroit	191,118	....	411,078	157,305	....	346,014	....	....	....	23,348	....	35,827	10,465	....	29,237
Port Huron	133,091	....	334,052	95,361	....	244,819	439	....	1.325	31,161	....	71,904	6,130	....	16,004
Lake Michigan	205.591	60,843	625,071	150,347	30,851	399,437	1,920	2,096	6,790	44,678	24,936	189,726	8,646	2,960	29,118
Chicago	68,898	8,678	227,702	35,025	7,067	110,012	640	....	228	27;336	1,611	98.812	5,897	....	18,650
Grand Haven	58,877	29,048	148,405	47,212	16,761	95,742	1,000	2,096	5,722	10,563	7,231	44,176	102	2,960	2,765
Milwaukee	77.816	23,117	248,964	68,110	7,023	193.683	280	....	840	6,779	16,094	46,738	2,647	....	7,703
Lake Erie	497.268	....	1,333,833	455,216	....	1,213,339	1,039	....	2,692	37,713	....	105,571	3,300	....	12,231
Buffalo	185,154	....	528,315	167,061	....	476,043	889	....	2,392	16,404	....	46,824	800	....	3,056
Cleveland	203,301	....	498,948	186,474	....	451,314	....	....	....	15,577	....	42,459	1,250	....	5,175
Erie	44,138	....	145,258	43,838	....	144,258	....	....	....	....	....	....	300	....	1,000
Sandusky	37,217	....	90,652	35,237	....	85,974	150	....	300	1,780	....	4,178	50	....	200
Suspension Bridge	8,300	....	23,612	7,551	....	20,732	....	....	....	749	....	2,880	....	....	....
Toledo	19,158	....	47,048	15,055	....	35,018	....	....	....	3,203	....	9,230	900	....	2.800
Lake Ontario	6,281	....	24,818	4,117	....	17,051	....	....	....	1,769	....	6,197	395	....	1,570
Cape Vincent	2,795	....	11,724	2,395	....	10,124	....	....	....	150	....	500	250	....	1,100
Oswego	1,644	....	6,083	240	....	1,016	....	....	....	1,259	....	4,597	145	....	470
Rochester	1,842	....	7,011	1,482	....	5,911	....	....	....	360	....	1,100	....	....	....
St. Lawrence river	17,334	376	46,658	12,479	376	32,799	303	....	1,242	4,272	....	11,757	280	....	860
Alexandria Bay	718	....	2,242	638	....	1,982	....	....	....	....	....	....	80	....	260
Clayton	14	....	75	14	....	75	....	....	....	....	....	....	....	....	....
Ogdensburg	16,602	376	44,341	11,827	376	30,742	303	....	1,242	4,272	....	11,757	200	....	600

a Not including estimated amount and value of the coal and wood used as fuel on 395 steamers not reporting these items. See supplementary table below.

SUPPLEMENTARY—ESTIMATED AMOUNT AND VALUE OF THE COAL AND WOOD USED AS FUEL ON 395 STEAMERS NOT REPORTING THESE ITEMS, THE ESTIMATE BEING BASED ON THE FIGURES ACTUALLY REPORTED FOR 1,072 STEAMERS.

GREAT LAKES AND ST. LAWRENCE RIVER.	Number of vessels.	Tons of coal.	Cords of wood.	Cost of fuel.
Total	395	412.320	22,969	$1,096,536

COMPARATIVE STATISTICS.

TABLE 24.—STEAMERS BY CLASSES IN 1880 AND 1889—NUMBER, TONNAGE, AND VALUE OF STEAMERS IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES, AND GIVEN BY CLASSES OF OCCUPATION.

CLASSES.	Year.	Number.	Tonnage.	Value.
Total	1880 1889	947 1, 467	222, 290 595, 813	$13, 918, 925 40, 868, 824
Passenger and freight	1880 1889	343 798	195, 625 560, 144	11, 253, 800 37, 010, 324
Ferry	1880 1889	28 40	3, 624 4, 702	340, 500 498, 000
Towing and harbor	1880 1889	426 520	20, 275 26, 200	1, 978, 800 2, 837, 800
Miscellaneous	1880 1889	150 109	2. 766 4, 767	345. 825 522, 700

TABLE 25.—EXPENSE ACCOUNTS IN 1880 AND 1889—GROSS EARNINGS OF STEAMERS OPERATING IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES, TOGETHER WITH THE AMOUNTS PAID OUT IN WAGES DURING THOSE YEARS.

GREAT LAKES AND ST. LAWRENCE RIVER.	Year.	Gross earnings.	Paid in wages.
Total	1880 1889	$12, 136, 228 24, 949, 267	$3, 293, 964 5, 796. 895

TABLE 26.—CREWS AND WAGES IN 1880 AND 1889—NUMBER OF MEN CONSTITUTING THE ORDINARY CREWS EMPLOYED ON ALL OPERATING STEAMERS IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES, TOGETHER WITH WAGES PAID, AVERAGES OF ANNUAL PAY, AND INCREASE PER MAN.

GREAT LAKES AND ST. LAWRENCE RIVER.	Year.	Total number men making ordinary crews.	Total wages paid.	Average annual wages per man.	Average annual increase in wages per man.
Total	1880 1889	9, 143 15, 271	$3, 293, 964 5, 796, 895	$360. 27 379. 60	.... $19. 33

TABLE 27.—TRAFFIC IN 1880 AND 1889—FREIGHT MOVED AND PASSENGERS CARRIED BY STEAMERS OPERATING ON THE GREAT LAKES AND ST. LAWRENCE RIVER IN 1880 AND 1889, AS REPORTED BY THE TENTH AND ELEVENTH CENSUSES.

GREAT LAKES AND ST. LAWRENCE RIVER.	Year.	Freight in tons.	PASSENGERS.		
			Total.	Regular and excursion.	Ferry.
Total	1880 1889	4, 368, 171 20, 143, 483	1. 356, 010 2, 235, 993	926, 250 1, 612, 519	429, 760 623, 474

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS, 1880-1889—NUMBER AND TONNAGE OF ALL STEAMERS, SAILING VESSELS, AND BARGES REGISTERED IN THE CUSTOMS DISTRICTS OF THE GREAT LAKES AND ST. LAWRENCE RIVER.

1880

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	2,487	552,341.59	912	209,465.06	1,415	302,264.70	160	40,611.83
Oswegatchie, New York	24	2,366.34	12	765.10	5	357.60	7	1,243.64
Cape Vincent, New York	54	5,280.77	19	647.24	35	4,633.53	....	....
Oswego, New York	88	17,064.80	22	956.57	66	16,108.23	....	....
Genesee, New York	22	3,116.82	12	1,977.15	10	1,139.67	....	....
Niagara, New York	12	3,458.04	4	1,785.71	8	1,672.33	....	....
Buffalo Creek, New York	219	101,256.76	115	57,958.44	77	36,876.68	27	6,421.64
Dunkirk, New York	4	643.92	2	36.81	2	607.11	....	....
Erie, Pennsylvania	35	23,464.14	23	18,353.07	12	5,111.07	....	....
Cuyahoga, Ohio	175	64,286.58	55	21,313.27	119	42,421.97	1	551.34
Sandusky, Ohio	83	14,164.74	28	4,743.25	53	9,008.15	2	413.34
Miami, Ohio	53	10,505.78	23	3,416.75	24	4,845.20	6	2,243.83
Detroit, Michigan	313	70,814.88	113	34,738.37	166	29,912.52	34	6,163.99
Huron, Michigan	303	51,613.36	104	18,362.99	130	12,875.37	69	20,375.00
Superior, Michigan	67	5,462.03	47	2,180.30	20	3,281.73	....	....
Michigan, Michigan	296	34,305.51	129	15,144.51	154	16,035.53	13	3,125.47
Chicago, Illinois	384	76,478.02	109	9,949.75	275	66,528.27	....	....
Milwaukee, Wisconsin	348	67,854.92	89	16,981.23	258	50,800.11	1	73.58
Duluth, Minnesota	7	204.18	6	154.55	1	49.63	....	....

1881

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	2,494	601,291.10	970	257,250.65	1,368	303,271.86	156	40,768.59
Oswegatchie, New York	27	2,799.91	12	823.73	7	620.27	8	1,355.91
Cape Vincent, New York	39	5,035.42	13	706.90	26	4,328.52	....	....
Oswego, New York	76	14,266.37	25	1,035.66	51	13,230.71	....	....
Genesee, New York	22	3,692.43	14	2,299.68	8	1,392.75	....	....
Niagara, New York	11	3,323.63	4	1,510.96	7	1,812.67	....	....
Buffalo Creek, New York	215	100,756.95	125	63,410.02	65	30,909.86	25	6,437.07
Dunkirk, New York	2	47.13	1	22.97	1	24.16	....	....
Erie, Pennsylvania	39	28,326.50	27	23,624.27	12	4,702.23	....	....
Cuyahoga, Ohio	181	75,548.27	65	33,019.16	112	40,961.71	4	1,567.40
Sandusky, Ohio	80	15,546.45	28	5,883.70	50	9,301.15	2	361.60
Miami, Ohio	49	15,337.65	26	7,329.58	18	6,104.61	5	1,903.46
Detroit, Michigan	303	77,699.11	121	39,608.63	159	33,574.14	23	4,516.34
Huron, Michigan	337	63,031.34	118	24,396.16	144	17,207.42	75	21,427.76
Superior, Michigan	79	9,136.86	50	3,632.01	29	5,504.85	....	....
Michigan, Michigan	305	34,978.84	138	15,429.97	154	16,423.40	13	3,125.47
Chicago, Illinois	367	75,595.47	107	11,916.42	260	63,679.05	....	....
Milwaukee, Wisconsin	353	75,919.65	89	22,430.43	263	53,415.64	1	73.58
Duluth, Minnesota	9	249.12	7	170.40	2	78.72	....	....

1882

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	2,610	642,127.88	1,082	288,967.60	1,371	311,111.26	157	42,049.02
Oswegatchie, New York	31	3,057.16	15	878.64	7	702.61	9	1,475.91
Cape Vincent, New York	55	4,378.51	20	746.95	34	3,596.16	1	35.40
Oswego, New York	70	13,213.09	24	1,030.09	46	12,183.00	....	....
Genesee, New York	23	3,822.99	16	2,485.00	7	1,337.99	....	....
Niagara, New York	16	4,130.77	8	2,306.00	8	1,824.77	....	....
Buffalo Creek, New York	219	109,574.60	128	70,996.15	61	30,092.54	30	8,485.91
Dunkirk, New York	2	47.13	1	22.97	1	24.16	....	....
Erie, Pennsylvania	43	29,609.38	31	24,793.73	12	4,815.65	....	....
Cuyahoga, Ohio	187	81,328.89	70	36,621.45	112	42,841.38	5	1,866.06
Sandusky, Ohio	87	16,581.25	29	7,201.87	56	9,017.78	2	361.60
Miami, Ohio	47	15,012.59	28	7,503.25	15	5,829.94	4	1,679.40
Detroit, Michigan	312	82,933.86	136	43,600.49	155	34,949.65	21	4,383.72
Huron, Michigan	343	69,113.96	118	24,466.24	154	24,085.75	71	20,561.97
Superior, Michigan	89	12,799.40	58	6,975.83	31	5,823.57	....	....
Michigan, Michigan	345	37,610.93	174	17,479.33	158	17,006.13	13	3,125.47
Chicago, Illinois	368	73,179.21	117	12,534.43	251	60,644.78	....	....
Milwaukee, Wisconsin	362	85,447.11	100	29,116.85	261	56,256.68	1	73.58
Duluth, Minnesota	11	287.05	[illegible]	208.33	2	78.72	....	....

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS, 1880-1889, ETC.—Continued.

1883

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	2, 612	651, 792. 75	1, 130	301, 256. 87	1, 332	307, 734. 46	150	42, 801. 42
Oswegatchie, New York	23	2, 492. 99	13	814. 02	3	346. 06	7	1, 332. 91
Cape Vincent, New York	49	3, 465. 25	16	566. 36	32	2, 863. 49	1	35. 40
Oswego, New York	69	13, 312. 97	24	1, 123. 96	45	12, 189. 01		
Genesee, New York	24	3, 809. 71	17	2, 500. 60	7	1, 309. 11		
Niagara, New York	17	3, 676. 71	8	1, 511. 22	9	2, 165. 49		
Buffalo Creek, New York	215	116, 483. 40	127	77, 832. 61	59	30, 069. 50	29	8, 581. 29
Dunkirk, New York	1	24. 16			1	24. 16		
Erie, Pennsylvania	37	28, 513. 65	27	24, 737. 58	10	3, 776. 07		
Cuyahoga, Ohio	183	78, 251. 25	74	36, 197. 64	105	41, 033. 77	4	1, 019. 84
Sandusky, Ohio	83	18, 187. 99	33	7, 305. 69	48	10, 520. 70	2	361. 60
Miami, Ohio	48	15, 947. 55	27	7, 997. 65	17	6, 270. 50	4	1, 679. 40
Detroit, Michigan	309	88, 702. 02	145	49, 427. 40	153	36, 275. 85	11	2, 998. 77
Huron, Michigan	366	72, 304. 18	134	25, 802. 57	154	22, 908. 45	78	23, 593. 16
Superior, Michigan	90	16, 100. 82	58	7, 024. 66	32	9, 076. 16		
Michigan, Michigan	351	36, 763. 82	180	17, 289. 62	158	16, 348. 73	13	3, 125. 47
Chicago, Illinois	372	70, 979. 22	130	13, 433. 40	242	57, 545. 82		
Milwaukee, Wisconsin	365	82, 402. 25	107	27, 317. 08	257	55, 011. 59	1	73. 58
Duluth, Minnesota	10	374. 81	10	374. 81				

1884

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	2, 558	657, 507. 36	1, 144	318, 962. 32	1, 294	305, 219. 52	120	33, 325. 52
Oswegatchie, New York	29	2, 688. 85	13	909. 82	7	394. 05	9	1, 384. 98
Cape Vincent, New York	50	3, 292. 91	19	690. 92	30	2, 566. 59	1	35. 40
Oswego, New York	66	12, 754. 83	21	1, 092. 64	45	11, 662. 19		
Genesee, New York	21	2, 533. 31	15	1, 241. 61	6	1, 291. 70		
Niagara, New York	16	3, 756. 96	7	1, 591. 47	8	1, 909. 23	1	256. 26
Buffalo Creek, New York	200	108, 199. 29	134	79, 918. 59	40	20, 659. 90	26	7, 620. 80
Dunkirk, New York	1	24. 16			1	24. 16		
Erie, Pennsylvania	[illegible]	28, 373. 37	27	24, 737. 58	9	3, 635. 79		
Cuyahoga, Ohio	184	87, 010. 15	78	43, 086. 39	104	43, 344. 18	2	579. 58
Sandusky, Ohio	83	22, 086. 58	34	7, 280. 01	47	14, 444. 97	2	361. 60
Miami, Ohio	52	17, 426. 56	28	8, 150. 85	20	7, 596. 31	4	1, 679. 40
Detroit, Michigan	309	93, 546. 94	144	54, 291. 00	154	36, 257. 17	11	2, 998. 77
Huron, Michigan	366	79, 210. 45	143	30, 220. 62	163	31, 361. 72	60	17, 628. 11
Superior, Michigan	93	16, 490. 50	61	7, 843. 65	32	8, 646. 85		
Michigan, Michigan	320	34, 039. 09	173	18, 673. 19	143	14, 585. 28	4	780. 62
Chicago, Illinois	366	68, 821. 93	129	13, 970. 78	237	54, 851. 15		
Milwaukee, Wisconsin	347	76, 403. 31	100	24, 503. 06	247	51, 900. 25		
Duluth, Minnesota	19	848. 17	18	760. 14	1	88. 03		

1885

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	2, 540	672, 631. 47	1, 154	332, 365. 33	1, 282	310, 383. 47	104	29, 882. 67
Oswegatchie, New York	31	3, 497. 74	15	933. 60	4	538. 52	12	2, 025. 62
Cape Vincent, New York	52	4, 075. 85	21	1, 443. 57	31	2, 632. 28		
Oswego, New York	59	12, 952. 17	20	2, 286. 33	38	10, 464. 79	1	201. 05
Genesee, New York	18	2, 311. 54	12	1, 019. 84	6	1, 291. 70		
Niagara, New York	18	4, 440. 30	7	1, 591. 47	11	2, 848. 83		
Buffalo Creek, New York	199	110, 761. 44	132	82, 100. 94	39	19, 809. 92	28	8, 850. 58
Dunkirk, New York	1	24. 16			1	24. 16		
Erie, Pennsylvania	39	28, 491. 04	29	24, 714. 97	10	3, 776. 07		
Cuyahoga, Ohio	183	92, 640. 52	81	48, 900. 43	101	43, 537. 04	1	203. 05
Sandusky, Ohio	77	21, 842. 07	31	7, 310. 29	45	14, 242. 38	1	289. 40
Miami, Ohio	54	17, 405. 17	30	7, 684. 54	20	8, 041. 23	4	1, 679. 40
Detroit, Michigan	302	93, 718. 70	138	52, 744. 83	154	38, 198. 34	10	2, 775. 53
Huron, Michigan	362	83, 742. 69	141	32, 831. 20	179	37, 943. 77	42	12, 967. 72
Superior, Michigan	91	16, 246. 60	63	8, 033. 86	28	8, 212. 74		
Michigan, Michigan	316	32, 683. 25	169	17, 249. 26	143	14, 653. 37	4	780. 62
Chicago, Illinois	361	67, 486. 98	135	15, 040. 76	226	52, 446. 22		
Milwaukee, Wisconsin	355	79, 358. 84	110	27, 724. 76	245	51, 634. 08		
Duluth, Minnesota	22	952. 41	20	754. 68	1	88. 03	1	109. 70

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS, 1880-1889, ETC.—Continued

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1886								
Total	2,547	683,154.43	1,258	378,376.16	1,195	279,573.84	94	25,204.43
Oswegatchie, New York	41	5,150.92	17	1,058.73	9	939.77	15	3,152.42
Cape Vincent, New York	51	4,040.56	20	1,410.71	31	2,629.85	.....	.....
Oswego, New York	54	11,421.61	19	1,897.57	34	9,322.99	1	201.05
Genesee, New York	17	2,022.82	12	1,034.63	5	988.19	.....	.....
Niagara, New York	18	4,505.58	7	1,469.99	11	3,035,59	.....	.....
Buffalo Creek, New York	193	103,745.43	132	78,954.00	36	18,312.87	25	6,478.56
Dunkirk, New York	1	24.16	.....	.....	1	24.16	.....	.....
Erie, Pennsylvania	37	28,141.97	29	24,720.63	8	3,421.34	.....	.....
Cuyahoga, Ohio	194	101,492.56	85	54,792.13	108	46,327.55	1	372.88
Sandusky, Ohio	82	24,019.61	36	9,319.60	45	14,410.11	1	289.90
Miami, Ohio	57	17,862.90	30	6,710.48	23	9,473.02	4	1,679.40
Detroit, Michigan	305	100,146.34	140	55,879.98	154	41,407.48	11	2,858.88
Huron, Michigan	357	86,292.25	138	34,273.37	188	42,737.86	31	9,281.02
Superior, Michigan	102	15,807.16	76	9,537.84	26	6,269.32	.....	.....
Michigan, Michigan	312	31,875.68	171	17,157.75	137	13,937.31	4	780.62
Chicago, Illinois	352	66,730.22	216	51,010.77	136	15,719.45	.....	.....
Milwaukee, Wisconsin	352	79,052.32	110	28,523.37	242	50,528.95	.....	.....
Duluth, Minnesota	22	822.34	20	624.61	1	88.03	1	109.70
1887								
Total	2,541	721,307.70	1,207	387,209.01	1,252	312,667.22	82	21,431.47
Oswegatchie, New York	44	10,069.70	20	6,235.71	8	659.22	16	3,174.77
Cape Vincent, New York	52	4,081.67	20	1,414.26	32	2,667.41	.....	.....
Oswego, New York	44	9,625.82	18	1,839.07	26	7,786.75	.....	.....
Genesee, New York	21	2,469.32	16	1,481.13	5	988.19	.....	.....
Niagara, New York	14	3,978.16	5	1,694.14	9	2,284.02	.....	.....
Buffalo Creek, New York	192	93,112.41	139	72,919.14	28	13,845.44	25	6,347.83
Dunkirk, New York	2	47.66	1	23.50	1	24.16	.....	.....
Erie, Pennsylvania	35	30,482.92	29	27,678.98	6	2,803.94	.....	.....
Cuyahoga, Ohio	205	123,888.58	93	70,720.70	111	52,795.00	1	372.88
Sandusky, Ohio	76	24,023.70	37	10,415.42	38	13,318.88	1	289.40
Miami, Ohio	63	17,900.27	32	7,877.68	27	8,343.19	4	1,679.40
Detroit, Michigan	285	103,032.26	137	58,893.89	140	42,012.43	8	2,125.94
Huron, Michigan	377	102,072.44	145	44,594.32	209	50,718.56	23	6,759.56
Superior, Michigan	105	17,091.61	78	10,287.61	27	6,804.00	.....	.....
Michigan, Michigan	300	29,761.36	168	16,628.74	129	12,560.63	3	571.99
Chicago, Illinois	356	72,420.05	137	22,605.98	219	49,814.07	.....	.....
Milwaukee, Wisconsin	350	76,515.28	114	31,361.98	236	45,153.30	.....	.....
Duluth, Minnesota	20	734.49	18	536.76	1	88.03	1	109.70
1888								
Total	2,641	806,189.10	1,323	476,035.74	1,242	312,285.94	76	17,867.42
Oswegatchie, New York	47	11,225.71	21	6,683.49	9	1,328.08	17	3,214.14
Cape Vincent, New York	58	4,581.85	24	1,567.30	34	3,014.55	.....	.....
Oswego, New York	41	7,481.47	19	1,842.40	22	5,639.07	.....	.....
Genesee, New York	20	2,717.03	15	1,571.73	4	755.49	1	389.81
Niagara, New York	18	4,554.60	9	2,270.58	9	2,284.02	.....	.....
Buffalo Creek, New York	211	114,405.77	164	95,968.36	25	13,248.27	22	5,189.14
Dunkirk, New York	1	24.16	.....	.....	1	24.16	.....	.....
Erie, Pennsylvania	34	27,749.22	30	25,989.47	4	1,759.75	.....	.....
Cuyahoga, Ohio	221	147,589.39	117	95,527.66	103	51,688.85	1	372.88
Sandusky, Ohio	79	27,443.61	44	14,933.09	34	12,221.12	1	289.40
Miami, Ohio	64	18,755.39	34	7,959.87	28	10,482.97	2	312.55
Detroit, Michigan	292	113,920.50	146	70,963.84	140	42,285.88	6	670.78
Huron, Michigan	393	113,413.54	153	49,377.62	219	57,717.19	21	6,318.73
Superior, Michigan	120	21,668.43	84	12,951.08	36	8,717.35	.....	.....
Michigan, Michigan	295	27,747.62	169	15,756.66	123	11,418.97	3	571.99
Chicago, Illinois	345	74,226.75	144	28,453.90	201	45,772.85	.....	.....
Milwaukee, Wisconsin	374	86,851.99	125	43,012.65	249	43,839.34	.....	.....
Duluth, Minnesota	28	1,832.07	25	1,206.04	1	88.03	2	538.00

COMPARATIVE STATISTICS—Continued.

TABLE 28.—FLEETS FOR THE 10 YEARS, 1880-1889, ETC.—Continued.

1889

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	2, 737	900, 846. 75	1, 436	571, 204. 78	1, 251	322, 694. 29	50	6, 947. 68
Oswegatchie, New York	53	13, 251. 25	21	7, 767. 11	9	2, 538. 64	23	2, 945. 50
Cape Vincent, New York	59	4, 451. 67	24	1, 683. 96	34	2, 694. 35	1	73. 36
Oswego, New York	36	8, 420. 30	19	3, 582. 18	17	4, 838. 12		
Genesee, New York	24	3, 779. 69	16	1, 769. 31	8	2, 010. 38		
Niagara, New York	17	5, 724. 32	8	3, 440. 30	9	2, 284. 02		
Buffalo Creek, New York	227	127, 379. 04	183	109, 439. 62	34	17, 024. 34	10	915. 08
Dunkirk, New York	4	508. 30	3	484. 14	1	24. 16		
Erie, Pennsylvania	38	29, 374. 58	34	28, 063. 24	4	1, 311. 34		
Cuyahoga, Ohio	241	176, 804. 22	132	119, 293. 27	106	56, 785. 99	3	724. 96
Sandusky, Ohio	82	30, 579. 75	49	16, 691. 69	33	13, 888. 06		
Miami, Ohio	59	16, 563. 90	36	9, 497. 00	23	7, 066. 90		
Detroit, Michigan	281	127, 430. 66	149	87, 003. 48	125	39, 338. 72	7	1. 088. 46
Huron, Michigan	450	131, 632. 10	186	60, 109. 41	263	71, 432. 36	1	90. 33
Superior, Michigan	122	30, 345. 42	90	22, 850. 82	32	7, 494. 60		
Michigan, Michigan	304	30, 381. 58	178	18, 157. 52	123	11, 652. 07	3	571. 99
Chicago, Illinois	342	73, 528. 81	151	28, 897. 39	191	44, 631. 42		
Milwaukee, Wisconsin	369	88, 753. 12	131	51, 162. 33	238	37, 590. 79		
Duluth, Minnesota	29	1, 938. 04	26	1, 312. 01	1	88. 03	2	538. 00

RECAPITULATION.

YEARS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total for 10 years	25, 767	6, 889, 190. 13	11, 616	3, 521, 093. 52	13, 002	3, 067, 206. 56	1, 149	300, 890. 05
1880	2, 487	552, 341. 59	912	209, 465. 06	1, 415	302, 264. 70	160	40, 611. 83
1881	2, 494	601, 291. 10	970	257, 250. 65	1, 368	303, 271. 86	156	40, 768. 59
1882	2, 610	642, 127. 88	1, 082	288, 967. 60	1, 371	311, 111. 26	157	42, 049. 02
1883	2, 612	651, 792. 75	1, 130	301, 256. 87	1, 332	307, 734. 46	150	42, 801. 42
1884	2, 558	657, 507. 36	1, 144	318, 962. 32	1, 294	305, 219. 52	120	33, 325. 52
1885	2, 540	672, 631. 47	1, 154	332, 365. 33	1, 282	310, 383. 47	104	29, 882. 67
1886	2. 547	683, 154. 43	1, 258	378, 376. 16	1, 195	279, 573. 84	94	25, 204. 43
1887	2, 541	721, 307. 70	1, 207	387, 209. 01	1, 252	312, 667. 22	82	21, 431. 47
1888	2, 641	806, 189. 10	1, 323	476, 035. 74	1, 242	312, 285. 94	76	17, 867. 42
1889	2, 737	900, 846. 75	1, 436	571, 204. 78	1, 251	322. 694. 29	50	6, 947. 68

COMPARATIVE STATISTICS—Continued.

TABLE 29.—TONNAGES FOR THE 10 YEARS, 1880-1889—NUMBER, AGGREGATE, AND AVERAGE TONNAGE OF ALL CRAFT REGISTERED AT THE CUSTOMS DISTRICTS OF THE GREAT LAKES AND ST. LAWRENCE RIVER.

STEAMERS.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Oswegatchie, New York	12	765	64	12	824	69	15	879	59	13	814	63	13	910	70
Cape Vincent, New York	19	647	34	13	707	54	20	747	37	16	566	35	19	691	36
Oswego, New York	22	957	44	25	1,036	41	24	1,030	43	24	1,124	47	21	1,093	52
Genesee, New York	12	1,977	165	14	2,300	164	16	2,485	155	17	2,501	147	15	1,242	83
Niagara, New York	4	1,786	447	4	1,511	378	8	2,306	288	8	1,511	189	7	1,591	227
Buffalo Creek, New York	115	57,958	504	125	63,410	507	128	70,996	555	127	77,833	613	134	79,919	596
Dunkirk, New York	2	37	19	1	23	23	1	23	23	......	......	......	......	......	......
Erie, Pennsylvania	23	18,353	798	27	23,624	875	31	24,794	800	27	24,738	916	27	24,738	916
Cuyahoga, Ohio	55	21,313	388	65	33,019	508	70	36,621	523	74	36,198	489	78	43,086	552
Sandusky, Ohio	28	4,743	169	28	5,884	210	29	7,202	248	33	7,306	221	34	7,280	214
Miami, Ohio	23	3,417	149	26	7,330	282	28	7,503	268	27	7,998	296	28	8,151	291
Detroit, Michigan	113	34,738	307	121	39,609	327	136	43,600	321	145	49,427	341	144	54,291	377
Huron, Michigan	104	18,363	177	118	24,396	207	118	24,466	207	134	25,803	193	143	30,221	211
Superior, Michigan	47	2,180	46	50	3,632	73	58	6,976	120	58	7,025	121	61	7,844	129
Michigan, Michigan	129	15,145	117	138	15,430	112	174	17,479	100	180	17,290	96	173	18,673	108
Chicago, Illinois	109	9,950	91	107	11,916	111	117	12,534	107	130	13,433	103	129	13,971	108
Milwaukee, Wisconsin	89	16,981	191	89	22,430	252	100	29,117	291	107	27,317	255	100	24,503	245
Duluth, Minnesota	6	155	26	7	170	24	9	208	23	10	375	38	18	760	42

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Oswegatchie, New York	15	934	62	17	1,059	62	20	6,236	312	21	6,683	318	21	7,767	370
Cape Vincent, New York	21	1,444	69	20	1,411	71	20	1,414	71	24	1,567	65	24	1,684	70
Oswego, New York	20	2,286	114	19	1,898	100	18	1,839	102	19	1,842	97	19	3,582	189
Genesee, New York	12	1,020	85	12	1,035	86	16	1,481	93	15	1,572	105	16	1,769	111
Niagara, New York	7	1,591	227	7	1,470	210	5	1,694	339	9	2,271	252	8	3,440	430
Buffalo Creek, New York	132	82,101	622	132	73,954	598	139	72,919	525	164	95,968	585	183	109,440	598
Dunkirk, New York	......	......	......	......	......	......	1	24	24	......	......	......	3	484	161
Erie, Pennsylvania	29	24,715	852	29	24,721	852	29	27,679	954	30	25,989	866	34	28,063	825
Cuyahoga, Ohio	81	48,900	604	85	54,792	645	93	70,721	760	117	95,528	816	132	119,293	904
Sandusky, Ohio	31	7,310	236	36	9,320	259	37	10,415	281	44	14,933	339	49	16,692	341
Miami, Ohio	30	7,685	256	30	6,710	224	32	7,878	246	34	7,960	234	36	9,497	264
Detroit, Michigan	138	52,745	382	140	55,880	399	137	58,894	430	146	70,964	486	149	87,003	584
Huron, Michigan	141	32,831	233	138	34,273	248	145	44,594	308	153	49,378	323	186	60,109	323
Superior, Michigan	63	8,034	128	76	9,538	126	78	10,288	132	84	12,951	154	90	22,851	254
Michigan, Michigan	169	17,249	102	171	17,158	100	168	16,629	99	169	15,757	93	178	18,158	102
Chicago, Illinois	135	15,041	111	216	51,011	236	137	22,606	165	144	28,454	198	151	28,897	191
Milwaukee, Wisconsin	110	27,725	252	110	28,523	259	114	31,362	275	125	43,013	344	131	51,162	391
Duluth, Minnesota	20	755	38	20	625	31	18	537	30	25	1,206	48	26	1,312	50

SAILING VESSELS.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Oswegatchie, New York	5	358	72	7	620	89	7	703	100	3	346	115	7	394	56
Cape Vincent, New York	35	4,634	132	26	4,329	167	34	3,596	106	32	2,863	89	30	2,567	86
Oswego, New York	66	16,108	244	51	13,231	259	46	12,183	265	45	12,189	271	45	11,662	259
Genesee, New York	10	1,140	114	8	1,393	174	7	1,338	191	7	1,309	187	6	1,292	215
Niagara, New York	8	1,672	209	7	1,813	259	8	1,825	228	9	2,165	241	8	1,909	239
Buffalo Creek, New York	77	36,877	479	65	30,910	476	61	30,093	493	59	30,070	510	40	20,660	517
Dunkirk, New York	2	607	304	1	24	24	1	24	24	1	24	24	1	24	24
Erie, Pennsylvania	17	5,111	426	12	4,702	392	12	4,816	401	10	3,776	378	9	3,636	404
Cuyahoga, Ohio	119	42,422	356	112	40,962	366	112	42,841	383	105	41,034	391	104	43,344	417
Sandusky, Ohio	53	9,008	170	50	9,301	186	56	9,018	161	48	10,521	219	47	14,445	307
Miami, Ohio	24	4,845	202	18	6,105	339	15	5,830	389	17	6,271	369	20	7,596	380
Detroit, Michigan	166	29,913	180	159	33,574	211	155	34,950	225	153	36,276	237	154	36,257	235
Huron, Michigan	130	12,875	99	144	17,207	119	154	24,086	156	154	22,908	149	163	31,362	192
Superior, Michigan	20	3,282	164	29	5,505	190	31	5,824	188	32	9,076	284	32	8,647	270
Michigan, Michigan	154	16,036	104	154	16,423	107	158	17,006	108	158	16,349	103	143	14,585	102
Chicago, Illinois	275	66,528	242	260	63,679	245	251	60,645	242	242	57,546	238	237	54,851	231
Milwaukee, Wisconsin	258	50,800	197	263	53,416	203	261	56,257	216	257	55,012	214	247	51,900	210
Duluth, Minnesota	1	50	50	2	79	40	2	79	40	......	......	......	1	88	88

COMPARATIVE STATISTICS—Continued.

TABLE 29.—TONNAGES FOR THE 10 YEARS, 1880-1889—Continued.

SAILING VESSELS—Continued.

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Oswegatchie, New York	4	539	135	9	940	104	8	659	82	9	1,328	148	9	2,539	282
Cape Vincent, New York	31	2,632	85	31	2,630	85	32	2,667	83	34	3,015	89	34	2,694	79
Oswego, New York	38	10,465	275	34	9,323	274	26	7,787	300	22	5,639	256	17	4,838	285
Genesee, New York	6	1,292	215	5	988	198	5	988	198	4	755	189	8	2,010	251
Niagara, New York	11	2,849	259	11	3,036	276	9	2,284	254	9	2,284	254	9	2,284	254
Buffalo Creek, New York	39	19,810	508	36	18,313	509	28	13,845	494	25	13,248	530	34	17,024	501
Dunkirk, New York	1	24	24	1	24	24	1	24	24	1	24	24	1	24	24
Erie, Pennsylvania	10	3,776	378	8	3,421	428	6	2,804	467	4	1,760	440	4	1,311	328
Cuyahoga, Ohio	101	43,537	431	108	46,328	429	111	52,795	476	103	51,689	502	106	56,786	536
Sandusky, Ohio	45	14,242	316	45	14,410	320	38	13,319	351	34	12,221	359	33	13,888	421
Miami, Ohio	20	8,041	402	23	9,473	412	27	8,343	309	28	10,483	374	23	7,067	307
Detroit, Michigan	154	38,198	248	154	41,407	269	140	42,012	300	140	42,286	302	125	39,339	315
Huron, Michigan	179	37,944	212	188	42,738	227	209	50,719	243	219	57,717	264	263	71,432	272
Superior, Michigan	28	8,213	293	26	6,269	241	27	6,804	252	36	8,717	242	32	7,495	234
Michigan, Michigan	143	14,653	102	137	13,937	102	120	12,561	97	123	11,419	93	123	11,652	95
Chicago, Illinois	226	52,446	232	136	15,719	116	219	49,814	227	201	45,773	228	191	44,631	234
Milwaukee, Wisconsin	245	51,634	211	242	50,529	209	236	45,153	191	249	43,839	176	238	37,591	158
Duluth, Minnesota	1	88	88	1	88	88	1	88	88	1	88	88	1	88	88

BARGES.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Oswegatchie, New York	7	1,244	178	8	1,356	170	9	1,476	164	7	1,333	190	9	1,385	154
Cape Vincent, New York							1	35	35	1	35	35	1	35	35
Oswego, New York															
Genesee, New York															
Niagara, New York													1	256	256
Buffalo Creek, New York	27	6,422	238	25	6,437	257	30	8,486	283	29	8,581	296	26	7,621	293
Dunkirk, New York															
Erie, Pennsylvania															
Cuyahoga, Ohio	1	551	551	4	1,567	392	5	1,866	373	4	1,020	255	2	580	290
Sandusky, Ohio	2	413	207	2	362	181	2	362	181	2	362	181	2	362	181
Miami, Ohio	6	2,244	374	5	1,903	381	4	1,679	420	4	1,679	420	4	1,679	420
Detroit, Michigan	34	6,164	181	23	4,516	196	21	4,384	209	11	2,999	273	11	2,999	273
Huron, Michigan	69	20,375	295	75	21,428	286	71	20,562	290	78	23,593	302	60	17,628	294
Superior, Michigan															
Michigan, Michigan	13	3,125	240	13	3,125	240	13	3,125	240	13	3,125	240	4	781	195
Chicago, Illinois															
Milwaukee, Wisconsin	1	74	74	1	74	74	1	74	74	1	74	74			
Duluth, Minnesota															

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Oswegatchie, New York	12	2,026	169	15	3,152	210	16	3,175	198	17	3,214	189	23	2,946	128
Cape Vincent, New York													1	73	73
Oswego, New York	1	201	201	1	201	201									
Genesee, New York										1	390	390			
Niagara, New York															
Buffalo Creek, New York	28	8,851	316	25	6,479	259	25	6,348	254	22	5,189	236	10	915	92
Dunkirk, New York															
Erie, Pennsylvania															
Cuyahoga, Ohio	1	203	203	1	373	373	1	373	373	1	373	373	3	725	242
Sandusky, Ohio	1	289	289	1	290	290	1	289	289	1	289	289			
Miami, Ohio	4	1,679	420	4	1,679	420	4	1,679	420	2	313	157			
Detroit, Michigan	10	2,776	278	11	2,859	260	8	2,126	266	6	671	112	7	1,088	155
Huron, Michigan	42	12,968	309	31	9,281	299	23	6,760	294	21	6,319	301	1	90	90
Superior, Michigan															
Michigan, Michigan	4	781	195	4	781	195	3	572	191	3	572	191	3	572	191
Chicago, Illinois															
Milwaukee, Wisconsin															
Duluth, Minnesota	1	110	110	1	110	110	1	110	110	2	538	269	2	538	269

COMPARATIVE STATISTICS—Continued.

TABLE 29.—TONNAGES FOR THE 10 YEARS, 1880-1889—Continued.

ALL CRAFT.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Oswegatchie, New York	24	2,367	99	27	2,800	104	31	3,058	99	23	2,493	108	29	2,689	93
Cape Vincent, New York	54	5,281	98	39	5.036	129	55	4,378	80	49	3,464	71	50	3,293	66
Oswego, New York	88	17,065	194	76	14,267	188	70	13,213	189	69	13,313	193	66	12,755	193
Genesee, New York	22	3,117	142	22	3,693	168	23	3,823	166	24	3,810	159	21	2,534	121
Niagara, New York	12	3,458	288	11	3,324	302	16	4,131	258	17	3,676	216	16	3,756	235
Buffalo Creek, New York	219	101,257	462	215	100,757	469	219	109,575	500	215	116,484	542	200	108,200	541
Dunkirk, New York	4	644	161	2	47	24	2	47	24	1	24	24	1	24	24
Erie, Pennsylvania	35	23,464	670	39	28,326	726	43	29,610	689	37	28,514	771	36	28,374	788
Cuyahoga, Ohio	175	64,286	367	181	75,548	417	187	81,328	435	183	78,252	428	184	87,010	473
Sandusky, Ohio	83	14,164	171	80	15,547	194	87	16,582	191	83	18,189	219	83	22,087	266
Miami, Ohio	53	10,506	198	49	15,338	313	47	15,012	319	48	15,948	332	52	17,426	335
Detroit, Michigan	313	70,815	226	303	77,699	256	312	82,934	266	309	88,702	287	309	93,547	303
Huron, Michigan	303	51,613	170	337	63,031	187	343	69,114	201	366	72,304	198	366	79,211	216
Superior, Michigan	67	5,462	82	79	9,137	116	89	12,800	144	90	16,101	179	93	16,491	177
Michigan, Michigan	296	34,306	116	305	34,978	115	345	37,610	109	351	36,764	105	320	34,039	106
Chicago, Illinois	384	76,478	199	367	75,595	206	368	73,179	199	372	70,979	191	366	68,822	188
Milwaukee, Wisconsin	348	67,855	195	353	75,920	215	362	85,448	236	365	82,403	226	347	76,403	220
Duluth, Minnesota	7	205	29	9	249	28	11	287	26	10	375	38	19	848	45

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Oswegatchie, New York	31	3,499	113	41	5,151	126	44	10,070	229	47	11,225	239	53	13,252	250
Cape Vincent, New York	52	4,076	78	51	4,041	79	52	4,081	78	58	4,582	79	59	4.451	75
Oswego, New York	59	12,952	220	54	11,422	212	44	9,626	219	41	7,481	182	36	8,420	234
Genesee, New York	18	2,312	128	17	2,023	119	21	2,469	118	20	2,717	136	24	3,779	157
Niagara, New York	18	4,440	247	18	4,506	250	14	3,978	284	18	4,555	253	17	5,724	337
Buffalo Creek, New York	199	110,762	557	193	103,746	538	192	93,112	485	211	114,405	542	227	127,379	561
Dunkirk, New York	1	24	24	1	24	24	2	48	24	1	24	24	4	508	127
Erie, Pennsylvania	39	28,491	731	37	28,142	761	35	30,483	871	34	27,749	816	38	29,374	773
Cuyahoga, Ohio	183	92,640	506	194	101,493	523	205	123,889	604	221	147,590	668	241	176,804	734
Sandusky, Ohio	77	21,841	284	82	24,020	293	76	24,023	316	79	27,443	347	82	30,580	373
Miami, Ohio	54	17,405	322	57	17,862	313	63	17,900	284	64	18,756	293	59	16,564	281
Detroit, Michigan	302	93,719	310	305	100,146	328	285	103,032	362	292	113,921	390	281	127,430	453
Huron, Michigan	362	83,743	231	357	86,292	242	377	102,073	271	393	113,414	289	450	131,631	293
Superior, Michigan	91	16,247	179	102	15,807	155	105	17,092	163	120	21,668	181	122	30,346	249
Michigan, Michigan	316	32,683	103	312	31,876	102	300	29,762	99	295	27,748	94	304	30,382	106
Chicago, Illinois	361	67,487	187	352	66,730	190	356	72,420	203	345	74,227	215	342	73,528	215
Milwaukee, Wisconsin	355	79,359	224	352	79,052	225	350	76,515	219	374	86,852	232	369	88,753	241
Duluth, Minnesota	22	953	43	22	823	37	20	735	37	28	1,832	65	29	1,938	67

COMPARATIVE STATISTICS—Continued.

TABLE **30.**—TONNAGE FLUCTUATIONS FOR THE 10 YEARS, 1880-1889—AVERAGE ANNUAL NUMBER AND TONNAGE OF ALL CRAFT REGISTERED AT THE CUSTOMS DISTRICTS OF THE GREAT LAKES AND ST. LAWRENCE RIVER, TOGETHER WITH THE INDICATED YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION.

STEAMERS.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Oswegatchie, New York	16	1889	21	1880	12	1882	15	9	2,687	1889	7,767	1880	765	1886	1,059	7,002
Cape Vincent, New York	20	1889	24	1881	13	1886	20	11	1,088	1889	1,684	1883	566	1886	1,411	1,118
Oswego, New York	21	1881	25	1887	18	1884	21	7	1,669	1889	3,582	1880	957	1887	1,839	2,625
Genesee, New York	15	1883	17	1885	12	1881	14	5	1,738	1883	2,501	1885	1,020	1889	1,769	1,481
Niagara, New York	7	1888	9	1880	4	1884	7	5	1,917	1889	3,440	1886	1,470	1880	1,786	1,970
Buffalo Creek, New York	138	1889	183	1880	115	1887	139	68	78,950	1889	109,440	1880	57,958	1886	78,954	51,482
Dunkirk, New York	2	1889	3	1881	1	1880	2	2	118	1889	484	1881	23	1880	37	461
Erie, Pennsylvania	29	1889	34	1880	23	1885	29	11	24,741	1889	28,063	1880	18,353	1884	24,738	9,710
Cuyahoga, Ohio	85	1889	132	1880	55	1886	85	77	55,947	1889	119,293	1880	21,313	1886	54,792	97,980
Sandusky, Ohio	35	1889	49	1880	28	1884	34	21	9,109	1889	16,692	1880	4,743	1886	9,320	11,949
Miami, Ohio	29	1889	36	1880	23	1882	28	13	7,413	1889	9,497	1880	3,417	1881	7,330	6,080
Detroit, Michigan	137	1889	149	1880	113	1887	137	36	54,715	1889	87,003	1880	34,738	1884	54,291	52,265
Huron, Michigan	138	1889	186	1880	104	1886	138	82	34,443	1889	60,109	1880	18,363	1886	34,273	41,746
Superior, Michigan	67	1889	90	1880	47	1885	63	43	9,132	1889	22,851	1880	2,180	1886	9,538	20,671
Michigan, Michigan	165	1883	180	1880	129	1887	168	51	16,897	1884	18,673	1880	15,145	1886	17,158	3,528
Chicago, Illinois	138	1886	216	1881	107	1887	137	109	20,781	1886	51,011	1880	9,950	1887	22,606	41,061
Milwaukee, Wisconsin	108	1889	131	1880	89	1883	107	42	30,213	1889	51,162	1880	16,981	1882	29,117	34,181
Duluth, Minnesota	16	1889	26	1880	6	1887	18	20	610	1889	1,312	1880	155	1886	625	1,157

SAILING VESSELS.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Oswegatchie, New York	7	1889	9	1883	3	1881	7	6	843	1889	2,539	1883	346	1886	940	2,193
Cape Vincent, New York	32	1880	35	1881	26	1883	32	9	3,163	1880	4,634	1884	2,567	1888	3,015	2,067
Oswego, New York	39	1880	66	1889	17	1885	38	49	10,342	1880	16,108	1889	4,838	1885	10,465	11,270
Genesee, New York	7	1880	10	1888	4	1882	7	6	1,251	1889	2,010	1888	756	1884	1,292	1,254
Niagara, New York	9	1886	11	1881	7	1887	9	4	2,212	1886	3,036	1880	1,672	1887	2,284	1,364
Buffalo Creek, New York	46	1880	77	1888	25	1884	40	52	23,085	1880	36,877	1888	13,248	1884	20,660	23,629
Dunkirk, New York	1	1880	2	1889	1	1885	1	1	82	1880	607	1889	24	1885	24	583
Erie, Pennsylvania	9	1880	12	1889	4	1884	9	8	3,511	1880	5,111	1889	1,311	1886	3,421	3,800
Cuyahoga, Ohio	108	1880	119	1885	101	1886	108	18	46,174	1889	56,786	1881	40,962	1886	46,328	15,824
Sandusky, Ohio	45	1882	56	1889	33	1885	45	23	12,037	1884	14,445	1880	9,008	1888	12,221	5,437
Miami, Ohio	21	1888	28	1882	15	1884	20	13	7,405	1888	10,483	1880	4,845	1884	7,596	5,638
Detroit, Michigan	150	1880	166	1889	125	1883	153	41	37,421	1888	42,286	1880	29,912	1885	38,198	12,374
Huron, Michigan	180	1889	263	1880	130	1885	179	133	36,899	1889	71,432	1880	12,875	1885	37,944	58,557
Superior, Michigan	29	1888	36	1880	20	1881	29	16	6,983	1888	8,717	1880	3,282	1887	6,804	5,435
Michigan, Michigan	142	1882	158	1888	123	1884	143	35	14,462	1882	17,006	1888	11,419	1884	14,585	5,587
Chicago, Illinois	224	1880	275	1886	136	1885	226	139	51,163	1880	66,528	1886	15,719	1885	52,446	50,809
Milwaukee, Wisconsin	250	1881	263	1887	236	1888	249	27	49,613	1882	56,256	1889	37,591	1880	50,800	18,665
Duluth, Minnesota	1	1881	2	1880	1	1886	1	1	82	1889	88	1880	50	1882	79	38

BARGES.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Oswegatchie, New York	12	1889	23	1880	7	1885	12	16	2,131	1888	3,214	1880	1,244	1885	2,026	1,970
Cape Vincent, New York	1								45	1889	73	1880	35	1884	35	38
Oswego, New York	1								201							
Genesee, New York	1								390							
Niagara, New York	1								256							
Buffalo Creek, New York	25	1882	30	1889	10	1886	25	20	6,533	1885	8,851	1889	915	1886	6,479	7,936
Dunkirk, New York																
Erie, Pennsylvania																
Cuyahoga, Ohio	2	1882	5	1880	1	1884	2	4	763	1882	1,866	1885	203	1889	725	1,663
Sandusky, Ohio	2			1888	1	1883	2	1	335	1880	413	1888	289	1883	362	124
Miami, Ohio	4	1880	6	1888	2	1884	4	4	1,615	1880	2,244	1888	313	1884	1,679	1,931
Detroit, Michigan	14	1880	34	1888	6	1884	11	28	3,058	1880	6,164	1888	671	1884	2,999	5,493
Huron, Michigan	47	1883	78	1889	1	1885	42	77	13,900	1883	23,593	1889	90	1885	12,968	23,503
Superior, Michigan																
Michigan, Michigan	7	1880	13	1889	3	1885	4	10	1,656	1880	3,125	1889	572	1885	781	2,553
Chicago, Illinois																
Milwaukee, Wisconsin	1								74							
Duluth, Minnesota	1	1889	2			1887	1	2	281	1889	538	1885	110	1887	110	428

ALL CRAFT.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Oswegatchie, New York	35	1888	47	1883	23	1882	31	24	5,660	1889	13,252	1880	2,367	1886	5,151	10,885
Cape Vincent, New York	52	1889	59	1881	39	1885	52	20	4,268	1880	5,281	1884	3,293	1882	4,378	1,988
Oswego, New York	60	1880	88	1889	36	1885	59	52	12,051	1880	17,065	1888	7,481	1886	11,422	9,584
Genesee, New York	21	1883	24	1886	17	1884	21	7	3,028	1882	3,823	1886	2,023	1880	3,117	1,800
Niagara, New York	16	1885	18	1881	11	1882	16	7	4,155	1889	5,724	1881	3,324	1882	4,131	2,400
Buffalo Creek, New York	209	1889	227	1887	192	1888	211	35	108,568	1889	127,379	1887	93,112	1884	108,200	34,267
Dunkirk, New York	2	1880	4	1883	1	1887	2	3	141	1880	644	1883	24	1887	48	620
Erie, Pennsylvania	37	1882	43	1888	34	1883	37	9	28,253	1887	30,483	1880	23,464	1881	28,326	7,019
Cuyahoga, Ohio	195	1889	241	1880	175	1886	194	66	102,884	1889	176,804	1880	64,286	1886	101,493	112,518
Sandusky, Ohio	81	1882	87	1887	76	1886	82	11	21,448	1889	30,580	1880	14,164	1885	21,842	16,416
Miami, Ohio	55	1888	64	1882	47	1885	54	17	16,272	1888	18,756	1880	10,506	1889	16,564	8,250
Detroit, Michigan	301	1882	312	1889	281	1885	302	31	95,195	1889	127,430	1880	70,815	1885	93,719	56,615
Huron, Michigan	365	1889	450	1880	303	1883	366	147	85,243	1889	131,631	1880	51,613	1886	86,292	80,018
Superior, Michigan	96	1889	122	1880	67	1884	93	55	16,115	1889	30,346	1880	5,462	1883	16,101	24,884
Michigan, Michigan	314	1883	351	1888	295	1885	316	56	33,015	1882	37,610	1888	27,748	1885	32,683	9,862
Chicago, Illinois	361	1880	384	1889	342	1885	361	42	71,945	1880	76,478	1886	66,730	1887	72,420	9,748
Milwaukee, Wisconsin	358	1888	374	1884	347	1885	355	27	79,856	1889	88,753	1880	67,855	1885	79,359	20,898
Duluth, Minnesota	18	1889	29	1880	7	1884	19	22	825	1889	1,938	1880	205	1886	823	1,733

COMPARATIVE STATISTICS—Continued.

TABLE 31.—SHIPBUILDING FOR THE 10 YEARS, 1880-1889 (GENERAL)—NUMBER AND TONNAGE OF ALL STEAMERS, SAILING VESSELS, AND BARGES BUILT IN THE LAKE AND RIVER CUSTOMS DISTRICTS FOR THE YEARS 1880 TO 1889, INCLUSIVE.

1880

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	117	20, 856. 86	63	14, 106. 46	47	5, 426. 76	7	1, 323. 64
Oswegatchie, New York	1	6. 93	1	6. 93				
Cape Vincent, New York	5	308. 41	2	113. 04	3	195. 37		
Oswego, New York	3	589. 70	1	238. 41	2	351. 29		
Niagara, New York	2	225. 06			1	99. 06	1	126. 00
Genesee, New York	1	125. 83	1	125. 83				
Buffalo Creek, New York	9	2, 151. 94	7	2, 121. 93	2	30. 01		
Cuyahoga, Ohio	9	3, 310. 64	7	3, 267. 87	2	42. 77		
Sandusky, Ohio	3	1, 370. 57	3	1, 370. 57				
Miami, Ohio	2	335. 15	1	18. 47			1	316. 68
Detroit, Michigan	21	7, 501. 74	12	4, 933. 60	7	2, 255. 59	2	312. 55
Huron, Michigan	21	1, 502. 88	4	142. 26	15	1, 290. 35	2	70. 27
Michigan, Michigan	23	764. 27	12	399. 71	11	364. 56		
Chicago, Illinois	1	37. 04	1	37. 04				
Milwaukee, Wisconsin	16	2, 626. 70	11	1, 330. 80	4	797. 76	1	498. 14

1881

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	175	65, 127. 71	109	49, 080. 21	52	12, 936. 32	14	3, 111. 18
Oswegatchie, New York	1	112. 27					1	112. 27
Cape Vincent, New York	4	153. 86	3	52. 89	1	100. 97		
Oswego, New York	6	377. 21	4	157. 61			2	219. 60
Niagara, New York								
Genesee, New York	2	265. 72	2	265. 72				
Buffalo Creek, New York	31	6, 927. 75	25	5, 729. 61			6	1, 198. 14
Cuyahoga, Ohio	14	14, 152. 05	12	13, 853. 56	2	298. 49		
Sandusky, Ohio	3	254. 80	1	161. 24	1	21. 36	1	72. 20
Miami, Ohio	3	2, 701. 08			3	2, 701. 08		
Detroit, Michigan	24	15, 633. 14	17	12, 999. 85	7	2, 633. 29		
Huron, Michigan	30	13, 256. 89	16	9, 829. 65	10	1, 918. 27	4	1, 508. 97
Superior, Michigan	5	1, 087. 28	1	8. 50	4	1, 078. 78		
Michigan, Michigan	23	2, 838. 26	16	2, 615. 63	7	222. 63		
Chicago, Illinois	6	1, 425. 54	4	893. 62	2	531. 92		
Milwaukee, Wisconsin	23	5, 941. 86	8	2, 512. 33	15	3, 429. 53		

1882

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	199	51, 748. 66	128	33, 596. 45	66	16, 163. 77	5	1, 988. 44
Oswegatchie, New York	1	62. 00	1	62. 00				
Cape Vincent, New York	3	48. 53			3	48. 53		
Oswego, New York	1	10. 30	1	10. 30				
Genesee, New York								
Niagara, New York	3	104. 16	1	28. 06	1	12. 10	1	64. 00
Buffalo Creek, New York	23	3, 294. 44	20	1, 814. 71			3	1. 479. 73
Erie, Pennsylvania	4	77. 77	4	77. 77				
Cuyahoga, Ohio	18	12, 902. 80	13	11, 319. 94	5	1, 582. 86		
Sandusky, Ohio	5	178. 98	3	140. 66	2	38. 32		
Detroit, Michigan	23	13, 185. 75	15	8, 750. 07	8	4, 435. 68		
Huron, Michigan	36	11, 953. 09	13	5, 323. 14	22	6, 185. 24	1	444. 71
Superior, Michigan	4	138, 25	4	138. 25				
Michigan, Michigan	35	3, 501. 55	26	2, 784. 61	9	716. 94		
Chicago, Illinois	15	1, 903. 61	11	351. 95	4	1, 551. 66		
Milwaukee, Wisconsin	28	4, 387. 43	16	2, 794. 99	12	1, 592. 44		

1883

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	134	24, 552. 25	100	17, 253. 42	31	6, 140. 46	3	1, 158. 37
Oswegatchie, New York	1	15. 88	1	15. 88				
Cape Vincent, New York	3	57. 60	1	12. 56	2	45. 04		
Oswego, New York	3	48. 84	2	35. 64	1	13. 20		
Genesee, New York								
Buffalo Creek, New York	22	4, 493. 49	21	4, 169. 24			1	324. 25
Cuyahoga, Ohio	8	5, 097. 71	5	1, 234. 46	3	3, 863. 25		
Sandusky, Ohio	1	5. 86			1	5. 86		
Miami, Ohio	4	77. 36	4	77. 36				
Detroit, Michigan	11	2, 504. 92	10	2, 454. 54	1	50. 38		
Huron, Michigan	24	7, 418. 94	15	5, 650. 50	7	934. 32	2	834. 12
Superior, Michigan	3	65. 88	1	22. 36	2	43. 52		
Michigan, Michigan	20	1, 301. 03	15	1, 205. 56	5	95. 47		
Chicago, Illinois	12	582. 72	9	344. 77	3	237. 95		
Milwaukee, Wisconsin	21	2, 847. 64	15	1, 996. 17	6	851. 47		
Duluth, Minnesota	1	34. 38	1	34. 38				

COMPARATIVE STATISTICS—Continued.

TABLE 31.—SHIPBUILDING FOR THE 10 YEARS, 1880-1889 (GENERAL)—Continued.

1884

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	110	27,882.99	80	20,205.69	29	7,667.30	1	10.00
Oswegatchie, New York	4	191.19	2	152.12	1	29.07	1	10.00
Cape Vincent, New York	2	37.88	2	37.88				
Oswego, New York	1	54.09	1	54.09				
Genesee, New York	1	20.39	1	20.39				
Niagara, New York	1	137.43	1	137.43				
Buffalo Creek, New York	20	4,279.33	20	4,279.33				
Cuyahoga, Ohio	7	3,032.70	5	1,924.77	2	1,107.93		
Sandusky, Ohio	2	1,958.42	1	111.46	1	1,846.96		
Miami, Ohio	2	74.56	2	74.56				
Detroit, Michigan	15	9,561.23	10	8,505.58	5	1,055.65		
Huron, Michigan	19	6,373.32	10	3,519.29	9	2,854.03		
Superior, Michigan	3	182.83	2	131.72	1	51.11		
Michigan, Michigan	18	770.16	14	632.64	4	137.52		
Chicago, Illinois	5	382.54	5	382.54				
Milwaukee, Wisconsin	8	770.25	3	200.89	5	569.36		
Duluth, Minnesota	2	56.67	1	41.00	1	15.67		

1885

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	95	24,508.79	64	20,228.52	28	3,729.74	3	550.53
Oswegatchie, New York	5	408.41	4	99.55			1	309.06
Cape Vincent, New York	10	915.73	6	791.20	4	124.53		
Oswego, New York								
Genesee, New York								
Niagara, New York	1	111.33			1	111.33		
Buffalo Creek, New York	8	2,307.30	8	2,307.30				
Erie, Pennsylvania	3	73.35	3	73.35				
Cuyahoga, Ohio	4	4,620.18	4	4,620.18				
Sandusky, Ohio	3	109.46	2	55.31	1	54.15		
Miami, Ohio	1	97.89	1	97.89				
Detroit, Michigan	9	6,082.32	5	5,077.23	3	873.32	1	131.77
Huron, Michigan	14	6,018.92	5	4,641.84	9	1,377.08		
Superior, Michigan	1	6.44			1	6.44		
Michigan, Michigan	11	1,359.14	7	976.94	4	382.20		
Chicago, Illinois	8	188.02	8	188.02				
Milwaukee, Wisconsin	15	2,063.39	10	1,262.70	5	800.69		
Duluth, Minnesota	2	146.91	1	37.21			1	109.70

1886

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	66	18,254.85	46	12,610 73	15	5,232.34	5	411.78
Oswegatchie, New York	3	148.44	2	50.07			1	98.37
Cape Vincent, New York	2	40.54	1	6.61	1	33.93		
Oswego, New York	1	13.51	1	13.51				
Genesee, New York	2	23.16	1	14.46	1	8.70		
Niagara, New York								
Buffalo Creek, New York	10	585.22	7	355.16			3	230.06
Erie, Pennsylvania	1	13.78	1	13.78				
Cuyahoga, Ohio	5	5,666.21	5	5,666.21				
Sandusky, Ohio	5	219.64	5	219.64				
Detroit, Michigan	3	2,998.64	1	1,923.95	1	991.34	1	83.35
Huron, Michigan	9	6,650.82	5	3,000.57	4	3,650.25		
Superior, Michigan	2	308.35	1	17.38	1	290.97		
Michigan, Michigan	13	462.12	7	216.59	6	245.53		
Chicago, Illinois	3	89.37	3	89.37				
Milwaukee, Wisconsin	6	1,023.43	6	1,023.43				
Duluth, Minnesota	1	11.62			1	11.62		

1887

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	117	52,454.42	75	47,183.46	34	4,892.52	8	378.44
Cape Vincent, New York	2	51.45			2	51.45		
Oswego, New York	4	124.74	3	117.65	1	7.09		
Genesee, New York	5	69.61	5	69.61				
Niagara, New York	8	857.95	7	837.36			1	20.59
Buffalo Creek, New York	14	5,160.91	12	4,961.88			2	199.03
Dunkirk, New York	2	58.88	2	58.88				
Erie, Pennsylvania	1	13.40	1	13.40				
Cuyahoga, Ohio	12	16,351.31	10	15,256.31	2	1,095.00		
Detroit, Michigan	11	10,554.08	8	8,655.89	3	1,898.19		
Huron, Michigan	22	13,690.34	11	12,131.93	6	1,399.59	5	158.82
Superior, Michigan	2	72.94			2	72.94		
Michigan, Michigan	18	1,605.29	11	1,470.85	7	134.44		
Chicago, Illinois	9	880.48	1	694.94	8	185.54		
Milwaukee, Wisconsin	7	2,963.04	4	2,914.76	3	48.28		

COMPARATIVE STATISTICS—Continued.

TABLE 31.—SHIPBUILDING FOR THE 10 YEARS, 1880-1889 (GENERAL)—Continued.

1888

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	183	96, 314. 73	139	86, 715. 98	42	9, 130. 98	2	467. 77
Oswegatchie, New York	3	112. 50	2	73. 03			1	39. 47
Cape Vincent, New York	6	130. 28	5	115. 26	1	15. 02		
Oswego, New York	5	346. 59	4	338. 19	1	8. 40		
Niagara, New York	7	864. 91	7	864. 91				
Buffalo Creek, New York	23	8, 049. 95	23	8, 049. 95				
Erie, Pennsylvania	3	127. 84	3	127. 84				
Cuyahoga, Ohio	23	29, 786. 13	22	28, 527. 51	1	1, 258. 62		
Sandusky, Ohio	5	396. 86	3	156. 95	2	239. 91		
Miami, Ohio	2	144. 12	2	144. 12				
Detroit, Michigan	19	20, 534. 68	17	18, 628. 35	2	1, 906. 33		
Huron, Michigan	31	22, 275. 08	19	17, 825. 58	12	4, 449. 50		
Superior, Michigan	5	856. 95	2	27. 60	3	829. 35		
Michigan, Michigan	17	2, 579. 85	12	2, 523. 31	5	56. 54		
Chicago, Illinois	3	98. 41	2	86. 79	1	11. 62		
Milwaukee, Wisconsin	30	9, 582. 28	16	9, 226. 59	14	355. 69		
Duluth, Minnesota	1	428. 30					1	428. 30

1889

CUSTOMS DISTRICTS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	179	102, 051. 75	145	93, 706. 73	32	8, 097. 76	2	247. 26
Oswegatchie, New York	1	13. 37	1	13. 37				
Cape Vincent, New York	4	135. 33	1	12. 67	2	49. 30	1	73. 36
Oswego, New York	1	51. 47	1	51. 47				
Genesee, New York								
Niagara, New York	1	141. 45	1	141. 45				
Buffalo Creek, New York	20	5, 239. 78	20	5, 239. 78				
Erie, Pennsylvania	2	29. 41	2	29. 41				
Cuyahoga, Ohio	23	31, 205. 32	22	31, 144. 00	1	61. 32		
Sandusky, Ohio	2	49. 97	2	49. 97				
Miami, Ohio	5	872. 18	4	859. 24	1	12. 94		
Detroit, Michigan	20	22, 425. 51	15	20, 128. 46	5	2, 297. 05		
Huron, Michigan	39	25, 459. 33	29	20, 979. 90	9	4, 305. 53	1	173. 90
Superior, Michigan	3	80. 36	2	69. 61	1	10. 75		
Michigan, Michigan	28	5, 188. 59	21	4, 382. 90	7	805. 69		
Chicago, Illinois	2	28. 58	2	28. 58				
Milwaukee, Wisconsin	28	11, 131. 10	22	10, 575. 92	6	555. 18		

RECAPITULATION.

YEARS.	TOTAL.		STEAMERS.		SAILING VESSELS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total for 10 years	1, 375	483, 753. 01	949	394, 687. 65	376	79, 417. 95	50	9, 647. 41
1880	117	20, 856. 86	63	14, 106. 46	47	5, 426. 76	7	1, 323. 64
1881	175	65, 127. 71	109	49, 080. 21	52	12, 936. 32	14	3, 111. 18
1882	199	51, 748. 66	128	33, 596. 45	66	16, 163. 77	5	1, 988. 44
1883	134	24, 552. 25	100	17, 253. 42	31	6, 140. 46	3	1, 158. 37
1884	110	27, 882. 99	80	20, 205. 69	29	7, 667. 30	1	10. 00
1885	95	24, 508. 79	64	20, 228. 52	28	3, 729. 74	3	550. 53
1886	66	18, 254. 85	46	12, 610. 73	15	5, 232. 34	5	411. 78
1887	117	52, 454. 42	75	47, 183. 46	34	4, 892. 52	8	378. 44
1888	183	96, 314. 73	139	86, 715. 98	42	9, 130. 98	2	467. 77
1889	179	102, 051. 75	145	93, 706. 73	32	8, 097. 76	2	247. 26

COMPARATIVE STATISTICS—Continued.

TABLE 32.—SHIPBUILDING FOR THE 10 YEARS, 1880–1889 (STEAMERS)—NUMBER AND TONNAGE OF ALL STEAMERS BUILT IN THE LAKE AND RIVER CUSTOMS DISTRICTS FOR THE DECADE 1880–1889, TOGETHER WITH DATE SHOWING THE NUMBER AND TONNAGE OF PROPELLER, SIDE-WHEEL, AND STERN-WHEEL STEAMERS BUILT EACH YEAR IN EACH DISTRICT.

CUSTOMS DISTRICTS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.		STERN-WHEEL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1880								
Total	63	14,106.46	55	12,014.71	3	1,929.53	5	162.22
Oswegatchie, New York	1	6.93	1	6.93				
Cape Vincent, New York	2	113.04	2	113.04				
Oswego, New York	1	238.41	1	238.41				
Genesee, New York	1	125.83			1	125.83		
Buffalo Creek, New York	7	2,121.93	7	2,121.93				
Cuyahoga, Ohio	7	3,267.87	7	3,267.87				
Sandusky, Ohio	3	1,370.57	3	1,370.57				
Miami, Ohio	1	18.47					1	18.47
Detroit, Michigan	12	4,933.60	11	3,338.67	1	1,594.93		
Huron, Michigan	4	142.26	4	142.26				
Michigan, Michigan	12	399.71	8	255.96			4	143.75
Chicago, Illinois	1	37.04	1	37.04				
Milwaukee, Wisconsin	11	1,330.80	10	1,122.03	1	208.77		
1881								
Total	109	49,080.21	106	47,846.79	2	1,197.38	1	36.04
Cape Vincent, New York	3	52.89	3	52.89				
Oswego, New York	4	157.61	4	157.61				
Genesee, New York	2	265.72	1	217.06	1	48.66		
Buffalo Creek, New York	25	5,729.61	25	5,729.61				
Cuyahoga, Ohio	12	13,853.56	11	13,817.52			1	36.04
Sandusky, Ohio	1	161.24	1	161.24				
Detroit, Michigan	17	12,999.85	16	11,851.13	1	1,148.72		
Huron, Michigan	16	9,829.65	16	9,829.65				
Superior, Michigan	1	8.50	1	8.50				
Michigan, Michigan	16	2,615.63	16	2,615.63				
Chicago, Illinois	4	893.62	4	893.62				
Milwaukee, Wisconsin	8	2.512.33	8	2,512.33				
1882								
Total	128	33,596.45	108	20,858.94	18	10,846.81	2	1,890.70
Oswegatchie, New York	1	62.00	1	62.00				
Oswego, New York	1	10.30	1	10.30				
Niagara, New York	1	28.06	1	28.06				
Buffalo Creek, New York	20	1,814.71	19	704.45	1	1,110.26		
Erie, Pennsylvania	4	77.77	3	31.67	1	46.10		
Cuyahoga, Ohio	13	11,319.94			11	9,429.24	2	1,890.70
Sandusky, Ohio	3	140.66			3	140.66		
Detroit, Michigan	15	8,750.07	15	8,750.07				
Huron, Michigan	13	5,323.14	13	5,323.14				
Superior, Michigan	4	138.25	4	138.25				
Michigan, Michigan	26	2,784.61	26	2,784.61				
Chicago, Illinois	11	351.95	11	351.95				
Milwaukee, Wisconsin	16	2,794.99	14	2,674.44	2	120.55		
1883								
Total	100	17,253.42	96	17,032.07	4	221.35		
Oswegatchie, New York	1	15.88	1	15.88				
Cape Vincent, New York	1	12.56	1	12.56				
Oswego, New York	2	35.64	2	35.64				
Buffalo Creek, New York	21	4,169.24	21	4,169.24				
Cuyahoga, Ohio	5	1,234.46	5	1,234.46				
Miami, Ohio	4	77.36	4	77.36				
Detroit, Michigan	10	2,454.54	10	2,454.54				
Huron, Michigan	15	5,650.50	15	5,650.50				
Superior, Michigan	1	22.36	1	22.36				
Michigan, Michigan	15	1,205.56	15	1,205.56				
Chicago, Illinois	9	344.77	9	344.77				
Milwaukee, Wisconsin	15	1,996.17	11	1,774.82	4	221.35		
Duluth, Minnesota	1	34.38	1	34.38				

COMPARATIVE STATISTICS—Continued.

TABLE 32.—SHIPBUILDING FOR THE 10 YEARS, 1880–1889 (STEAMERS)—Continued.

1884

CUSTOMS DISTRICTS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.		STERN-WHEEL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	80	20,205.69	73	17,206.94	3	2,742.56	4	256.19
Oswegatchie, New York	2	152.12	2	152.12				
Cape Vincent, New York	2	37.88	2	37.88				
Oswego, New York	1	54.09	1	54.09				
Genesee, New York	1	20.39	1	20.39				
Niagara, New York	1	137.43	1	137.43				
Buffalo Creek, New York	20	4,279.33	19	3,866.66	1	412.67		
Cuyahoga, Ohio	5	1,924.77	5	1,924.77				
Sandusky, Ohio	1	111.46	1	111.46				
Miami, Ohio	2	74.56	2	74.56				
Detroit, Michigan	10	8,505.58	8	6,175.69	2	2,329.89		
Huron, Michigan	10	3,519.29	10	3,519.29				
Superior, Michigan	2	131.72	2	131.72				
Michigan, Michigan	14	632.64	11	527.11			3	105.53
Chicago, Illinois	5	382.54	5	382.54				
Milwaukee, Wisconsin	3	200.89	2	50.23			1	150.66
Duluth, Minnesota	1	41.00	1	41.00				

1885

CUSTOMS DISTRICTS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.		STERN-WHEEL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	64	20,228.52	60	19,371.66	4	856.86		
Oswegatchie, New York	4	99.35	4	99.35				
Cape Vincent, New York	6	791.20	4	33.47	2	757.73		
Buffalo Creek, New York	8	2,307.30	8	2,307.30				
Erie, Pennsylvania	3	73.35	3	73.35				
Cuyahoga, Ohio	4	4,620.18	4	4,620.18				
Sandusky, Ohio	2	55.31	2	55.31				
Miami, Ohio	1	97.89	1	97.89				
Detroit, Michigan	5	5,077.23	5	5,077.23				
Huron, Michigan	5	4,641.84	5	4,641.84				
Michigan, Michigan	7	976.94	7	976.94				
Chicago, Illinois	8	188.02	8	188.02				
Milwaukee, Wisconsin	10	1,262.70	9	1,200.78	1	61.92		
Duluth, Minnesota	1	37.21			1	37.21		

1886

CUSTOMS DISTRICTS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.		STERN-WHEEL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	46	12,610.73	43	10,024.40	2	2,462.15	1	124.18
Oswegatchie, New York	2	50.07	2	50.07				
Cape Vincent, New York	1	6.61	1	6.61				
Oswego, New York	1	13.51	1	13.51				
Genesee, New York	1	14.46	1	14.46				
Buffalo Creek, New York	7	355.16	7	355.16				
Erie, Pennsylvania	1	13.78	1	13.78				
Cuyahoga, Ohio	5	5,666.21	4	5,128.01	1	538.20		
Sandusky, Ohio	5	219.64	4	95.46			1	124.18
Detroit, Michigan	1	1,923.95			1	1,923.95		
Huron, Michigan	5	3,000.57	5	3,000.57				
Superior, Michigan	1	17.38	1	17.38				
Michigan, Michigan	7	216.59	7	216.59				
Chicago, Illinois	3	89.37	3	89.37				
Milwaukee, Wisconsin	6	1,023.43	6	1,023.43				

1887

CUSTOMS DISTRICTS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.		STERN-WHEEL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	75	47,183.46	74	47,166.07	1	17.39		
Oswego, New York	3	117.65	3	117.65				
Genesee, New York	5	69.61	5	69.61				
Niagara, New York	7	837.36	7	837.36				
Buffalo Creek, New York	12	4,961.88	11	4,944.49	1	17.39		
Dunkirk, New York	2	58.88	2	58.88				
Erie, Pennsylvania	1	13.40	1	13.40				
Cuyahoga, Ohio	10	15,256.31	10	15,256.31				
Detroit, Michigan	8	8,655.89	8	8,655.89				
Huron, Michigan	11	12,131.93	11	12,131.93				
Michigan, Michigan	11	1,470.85	11	1,470.85				
Chicago, Illinois	1	694.94	1	694.94				
Milwaukee, Wisconsin	4	2,914.76	4	2,914.76				

COMPARATIVE STATISTICS—Continued.

TABLE 32.—SHIPBUILDING FOR THE 10 YEARS, 1880-1889 (STEAMERS)—Continued.

1888

CUSTOMS DISTRICTS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.		STERN-WHEEL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	139	86,715.98	136	86,564.69	2	114.97	1	36.32
Oswegatchie, New York	2	73.03	2	73.03				
Cape Vincent, New York	5	115.26	5	115.26				
Oswego, New York	4	338.19	4	338.19				
Niagara, New York	7	864.91	7	864.91				
Buffalo Creek, New York	23	8,049.95	23	8,049.95				
Erie, Pennsylvania	3	127.84	3	127.84				
Cuyahoga, Ohio	22	28,527.51	22	28,527.51				
Sandusky, Ohio	3	156.95	2	120.63				
Miami, Ohio	2	144.12	2	144.12			1	36.32
Detroit, Michigan	17	18,628.35	17	18,628.35				
Huron, Michigan	19	17,825.58	19	17,825.58				
Superior, Michigan	2	27.60	2	27.60				
Michigan, Michigan	12	2,523.31	11	2,435.03	1	88.28		
Chicago, Illinois	2	86.79	1	60.10	1	26.69		
Milwaukee, Wisconsin	16	9,226.59	16	9,226.59				

1889

Total	145	93,706.73	138	89,188.68	6	4,328.09	1	189.96
Oswegatchie, New York	1	13.37	1	13.37				
Cape Vincent, New York	1	12.67	1	12.67				
Oswego, New York	1	51.47	1	51.47				
Niagara, New York	1	141.45	1	141.45				
Buffalo Creek, New York	20	5,239.78	20	5,239.78				
Erie, Pennsylvania	2	29.41	2	29.41				
Cuyahoga, Ohio	22	31,144.00	21	29,632.88	1	1,511.12		
Sandusky, Ohio	2	49.97	2	49.97				
Miami, Ohio	4	859.24	3	300.65	1	558.59		
Detroit, Michigan	15	20,128.46	13	18,036.56	2	2,091.90		
Huron, Michigan	29	20,979.90	28	20,908.95	1	70.95		
Superior, Michigan	2	69.61	2	69.61				
Michigan, Michigan	21	4,382.90	21	4,382.90				
Chicago, Illinois	2	28.58	2	28.58				
Milwaukee, Wisconsin	22	10,575.92	20	10,290.43	1	95.53	1	189.96

RECAPITULATION.

YEARS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.		STERN-WHEEL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total for the 10 years	949	394,687.65	889	367,274.95	45	24,717.09	15	2,695.61
1880	63	14,106.46	55	12,014.71	3	1,929.53	5	162.22
1881	109	49,080.21	106	47,846.79	2	1,197.38	1	36.04
1882	128	33,596.45	108	20,858,94	18	10,846.81	2	1,890.70
1883	100	17,253.42	[illegible]	17,032.07	4	221.35		
1884	80	20,205.69	73	17,206.94	3	2,742.56	4	256.19
1885	64	20,228.52	60	19,371.66	4	856.86		
1886	46	12,610.73	43	10,024.40	2	2,462.15	1	124.18
1887	75	47,183.46	74	47,166.07	1	17.39		
1888	139	86,715.98	136	86,564.69	2	114.97	1	36.32
1889	145	93,706.73	138	89.188.68	6	4,328.09	1	189.96

CONGRESSIONAL APPROPRIATIONS.

TABLE 33.—APPROPRIATIONS BY DETAILED LOCALITIES—CONGRESSIONAL APPROPRIATIONS FOR THE SURVEY, IMPROVEMENT, AND MAINTENANCE OF THE HARBORS OF THE GREAT LAKES, AND OF THE RIVERS FLOWING INTO THEM, FROM THE EARLIEST DATE OF APPROPRIATION TO 1890, INCLUSIVE, GIVEN BY DETAILS OF LOCALITY AND TIME.

LOCALITIES.	Date of earliest appropriations.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress, September, 1890.	Total appropriations up to date.
Total	1823	$23, 700, 565	$12, 999, 165	$4, 213, 245	$40, 912, 975
Lake Superior	1858	3, 467, 555	3, 738, 500	2, 027, 245	9, 233, 300
Agate bay, Minnesota	1886	....	37, 500	25, 000	62, 500
Ashland harbor, Wisconsin	1886	....	82, 500	60, 000	142, 500
Duluth harbor, Minnesota	1871	261, 050	291, 250	100, 000	652, 300
Eagle harbor, Michigan	1866	97, 000	....	....	97, 000
Grand Marais harbor, Minnesota	1879	10, 000	85, 000	22, 350	117, 350
Grand Marais harbor of refuge, Michigan	1879	10, 000	291, 250	50, 000	351, 250
Marquette harbor, Michigan	1860	297. 230	48, 000	40, 000	385, 230
Ontonagon harbor, Michigan	1867	202, 600	95, 500	10, 000	308, 100
Portage Lake ship canal, Michigan	1886	....	10, 000	350, 000	360, 000
St. Marys river and canal, Michigan	1858	2, 215, 692	2, 625, 000	1, 300, 000	6, 140, 692
Superior and St. Louis bays, Wisconsin	1873	373, 983	172, 500	69, 895	616, 378
Lakes Huron and St. Clair	1852	1, 934. 310	1, 511, 890	245, 500	3, 691, 700
Alpena harbor (Thunder bay), Michigan	1876	4, 500	15, 000	15, 500	35, 000
Au Sable river and harbor, Michigan	1867	95, 750	18, 000	....	113, 750
Belle river, Michigan	1881	....	14, 000	....	14, 000
Black river, Michigan	1888	....	10. 000	35, 000	45. 000
Cheboygan harbor, Michigan	1871	91, 000	57, 000	....	148, 000
Clinton river, Michigan	1852	11, 500	30, 000	10, 000	51, 500
Clinton harbor, Michigan	1882	....	3, 000	....	3, 000
Detroit river, Michigan	1874	175. 000	528, 000	....	703, 000
Harbor of refuge at Sand Beach, Michigan	1871	700, 000	420, 000	30, 000	1, 150, 000
St. Clair river, flats, and canal	1852	653, 560	111, 140	80, 000	844, 700
Saginaw river, Michigan	1866	195 000	298, 750	75, 000	568, 750
Sebawaing harbor, Michigan	1875	8, 000	7, 000	....	15, 000
Lake Michigan	1826	6, 440, 843	3, 917, 400	893, 000	11, 251, 243
Ahnapee harbor, Wisconsin	1871	103, 000	62, 000	6, 000	171, 000
Black Lake harbor, Michigan	1852	217, 615	47. 000	10, 000	274, 615
Calumet harbor and river, Illinois	1870	277, 000	135, 400	70, 000	482, 400
Cedar river (Green Bay), Michigan	1882	....	30, 000	....	30, 000
Charlevoix harbor, Michigan	1876	31, 000	62, 500	9, 000	102, 500
Chicago harbor, Illinois	1833	1, 134, 005	870, 000	100, 000	2, 104, 005
Fox river (mouth of), Wisconsin	1867	40, 000	....	....	40, 000
Frankfort harbor, Michigan	1866	213, 660	50, 000	10, 000	273, 660
Grand Haven harbor, Michigan	1852	303, 866	245. 000	75, 000	623, 866
Grand river, Michigan	1881	....	50, 000	....	50, 000
Green Bay harbor, Wisconsin	1866	229, 550	58, 000	10, 000	297, 550
Kenosha harbor, Wisconsin	1844	194, 307	33. 500	17, 000	244, 807
Kewaunee harbor, Wisconsin	1881	....	55. 000	20, 000	75, 000
Lake Winnebago, Wisconsin	1839	500	....	....	500
La Plaisance bay, Michigan	1826	19, 803	....	....	19, 803
Ludington harbor, Michigan	1867	196, 185	156, 250	....	352, 435
Manistee harbor, Michigan	1867	183. 000	65, 000	50, 000	298, 000
Manistique harbor, Michigan	1880	....	6, 000	....	6, 000
Manitowoc harbor, Wisconsin	1852	240, 820	59, 000	8, 000	307, 820
Menominee harbor, Wisconsin	1871	153, 000	59, 000	54, 000	266, 000
Michigan city (outer harbor), Indiana	1836	679, 889	304, 375	50, 000	1, 034. 264
Michigan city (inner harbor), Indiana	1880	....	76, 875	7, 500	84, 375
Milwaukee bay, Wisconsin	1881	....	415, 000	86, 000	501, 000
Milwaukee harbor, Wisconsin	1836	335, 987	38, 000	....	373, 987
Muskegon harbor, Michigan	1867	140, 000	130, 000	50, 000	320, 000
Neenah river, Wisconsin	1839	2, 500	....	100, 000	102, 500
New Buffalo harbor, Michigan	1852	78, 000	5, 000	....	83, 000
Oconto harbor, Wisconsin	1881	....	68, 000	....	68, 000
Pensaukee harbor, Wisconsin	1882	....	15, 000	....	15, 000
Pentwater harbor, Michigan	1867	168, 820	57, 000	8, 000	233, 820
Petoskey harbor, Michigan	1890	....	....	15, 000	15, 000
Port Washington, Wisconsin	1870	100, 500	84, 000	3, 000	187, 500
Portage Lake harbor of refuge, Michigan	1879	10, 000	82, 500	8, 000	100, 500
Racine harbor, Wisconsin	1844	201. 285	46, 000	17, 500	264, 785
St. Josephs harbor, Michigan	1836	280, 113	67, 000	20, 000	367, 113
St. Josephs river (survey), Michigan	1888	....	2, 500	1, 000	3, 500
Saugatuck harbor, Michigan	1868	105, 439	35, 000	....	140, 439
Sheboygan harbor, Wisconsin	1852	183, 449	120, 000	15, 000	318, 449
South Haven harbor, Michigan	1867	149, 500	42, 500	15, 000	207. 000
Sturgeon bay, Wisconsin	1873	110, 000	55, 000	3, 000	168, 000
Two Rivers harbor, Wisconsin	1871	140, 000	60, 500	3, 000	203. 500
Waukegan harbor, Illinois	1852	15, 000	115, 000	35, 000	165. 000
White River harbor, Michigan	1867	203, 050	54, 500	17, 000	274, 550

CONGRESSIONAL APPROPRIATIONS—Continued.

TABLE 33.—APPROPRIATIONS BY DETAILED LOCALITIES—Continued.

LOCALITIES.	Date of earliest appropriations.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress, September, 1890.	Total appropriations up to date.
Lake Erie	1823	$5.362,336	$2,712,500	$804,500	$8,879,336
Ashtabula harbor, Ohio	1826	290,711	137,500	40,000	468,211
Black River harbor, Ohio	1879	175,205	45,000	12.000	232,205
Buffalo harbor, New York	1826	1,410,495	742,500	300,000	2,452,995
Cattaraugus creek, New York	1836	57,410			57,410
Cleveland harbor, Ohio	1825	654,882	793,750	75,000	1,523,632
Conneaut harbor, Ohio	1829	106,629	6,000		112,629
Cunningham creek, Ohio	1826	19,781			19,781
Dunkirk harbor, New York	1827	430,946	55,000	20,000	505,946
Erie harbor, Pennsylvania	1823	616,367	235,500	40,000	891,867
Grand River harbor (Fairport), Ohio	1825	229,124	61,750	30,000	320.874
Huron river and harbor, Ohio	1826	98.274	25,000	16,000	139,274
Monroe harbor, Michigan	1835	209,515	11,000	5,000	225,515
Port Clinton harbor, Ohio	1872	40,000	23,000	3,000	66,000
Portland harbor, New York	1836	56,616			56.616
Rocky River harbor, Ohio	1872	35,000	4,000		39,000
Rouge River, Michigan	1888		10,000	10.000	20,000
Sandusky City harbor, Ohio	1826	222,980	97,500	45,000	365,480
Sandusky river, Ohio	1867	30,000	21,500	1,500	53,000
Toledo harbor, Ohio	1866	564,700	432.500	205,000	1,202,200
Vermilion river, Ohio	1836	113,701	11,000	2,000	126,701
Lake Ontario	1826	2,581,855	895,875	115,000	3,592,730
Black river (Sacketts harbor), New York	1836	42,400			42,400
Charlotte harbor, New York	1828	310,578	133,750	25,000	469,328
Great Sodus bay, New York	1829	343,772	83,875	10,000	437,647
Little Sodus bay, New York	1852	194,442	103.500	13,000	310,942
Oak Orchard harbor, New York	1836	173,000	27,000	5,000	205,000
Olcott harbor, New York	1867	115,000	18,000	30,000	163,000
Oswego harbor, New York	1826	1,264,363	471,250	30,000	1,765,613
Port Ontario harbor, New York	1836	50,000			50,000
Pultneyville harbor, New York	1870	62,000	9,000	2,000	73,000
Sacketts harbor, New York	1826	6,000	9,000		15,000
Sandy creek, New York	1828	300			300
Wilson harbor, New York	1875	20,000	40,500		60,500
St. Lawrence river	1852	140,006	58,500	53,000	251,506
Grass river, New York	1882		3,000	6,000	9,000
Ogdensburg harbor, New York	1852	110,006	50,000	42,000	202,006
Sister islands, New York	1890			5,000	5,000
Waddington harbor, New York	1873	30,000	5,500		35,500
Niagara river	1829	52,098	106,500	75,000	233,598
Black Rock harbor, New York	1829	52,098			52,098
Tonawanda harbor, New York	1881		106,500	75,000	181,500
General appropriations	1836	3,721,562	58,000		3,779,562
General repairs of harbor	1844	270,000			270,000
Surveys	1866	175,000			175,000
Survey steamer	1854	50,000			50,000
Chart-making	1849	130,000			130,000
Hydrographic surveys	1841	2,973,879	58,000		3,031,879
Construction of dredging machines	1836	122,683			122,683

TRANSPORTATION ON LAKE CHAMPLAIN.

The statistics of transportation on Lake Champlain were but partially given in the fourth volume of the Tenth Census, and to have included the statistics of this sheet of water in the report on the Great Lakes and St. Lawrence river for the Eleventh Census would have stood in the way of preparing any comparative statistics for 1880 and 1890. It was therefore decided to make a separate report for Lake Champlain. No record was made either of early commercial operations on Lake Champlain except the statement that 1 of the first 4 steamers built on all the northern lakes was a craft of 298.57 tons, which was constructed on Lake Champlain about the year 1818.

All that it is necessary to say concerning Lake Champlain in the way of physical geography is that it forms the boundary line for its whole length between the states of New York and Vermont, and is 100 miles long from its head of navigation at Whitehall, in Washington county, New York, to its farthest northward extension where it joins the boundary line between Quebec and the states of New York and Vermont. Its area, however, is not as great as its length would seem to indicate, for while its northern part incloses several small islands and is nearly 14 miles wide, more than half of its entire length is not more than 5 miles wide and in some places is less than 1 mile wide. Its greatest ascertained depth is 600 feet, and its surface is 93 feet higher than the level of the sea. Its surplus waters are discharged into the St. Lawrence by the river Richelieu, while on the east it receives the waters of the Missisquoi, the Lamoille, and the Winooski rivers, and Otter creek; from the south those of the Poultney; the contributing streams on the west being the Chazy, the Saranac, and the Au Sable rivers.

It may be added that besides being an important channel of navigation in itself it is connected with the Hudson river by the Champlain canal, which extends from Whitehall to Albany.

PLAN OF THE TABLES.

The plan adopted for the presentation of the statistical results of the investigation by the Eleventh Census into the industry of transportation on Lake Champlain, with some necessary modifications, is the same that was followed in considering the Great Lakes and St. Lawrence river, the numbers and the titles of the 17 tables which have been prepared in this instance being as follows:

Equipment, occupation, and construction:
  Table 1—Equipment in general.
  Table 2—Equipment of fleets, by classes.
  Table 3—Percentages of tonnage and valuation.
  Table 4—Construction, by localities.
  Table 5—Construction, by materials.

Traffic operations:
  Table 6—Freight movement in general.
  Table 7—Freight movement, by ports and commodities.

Earnings and expense accounts:
  Table 8—Financial account in general.
  Table 9—Expense account in detail.
  Table 10—Employés and wages.
  Table 11—Fuel account.

Comparative statistics:
  Table 12—Fleets for the 10 years 1880-1889.
  Table 13—Vessel tonnage for the 10 years 1880-1889.
  Table 14—Tonnage fluctuations for the 10 years 1880-1889.
  Table 15—Shipbuilding for the 10 years 1880-1889 (general).
  Table 16—Shipbuilding for the 10 years 1880-1889 (steamers).

Congressional appropriations:
  Table 17—Appropriations, by localities.

The preceding list shows clearly the scheme on which the tabulation of the Lake Champlain statistics has been carried out, while the following synopsis will more explicitly show what the tables contain:

EQUIPMENT.

Table 1, "Equipment in general", shows the number, tonnage, and value of all the steamers and sailing vessels of over 5 tons burden owned on Lake Champlain in 1889, entered by ports.

Table 2, entitled "Equipment of fleets, by classes", divides the entries of Table 1, separating the total number, tonnage, and value of all steamers and sailing vessels into classes, retaining the separate entries by ports. The steamers are divided into 4 classes, namely, side-wheel passenger steamers, propellers carrying both passengers and freight, tugs, and all other classes, while the sailing vessels are divided into 2 classes, schooners and sloops.

Table 3, entitled "Percentages of tonnage and valuation", gives the number, gross and net tonnage, estimated carrying capacity, valuation, and value per gross ton of all vessels owned on Lake Champlain, the entire lake fleet being divided into 8 classes of occupation, and the percentages of both the tonnage and valuation of each of these classes to the lake totals being given.

CONSTRUCTION.

Table 4, "Construction, by localities", gives the number, tonnage, value, average value per ton, and the average tonnage of all vessels owned on Lake Champlain per material of construction, given by separate entries for each port.

Table 5, entitled "Construction, by materials", gives the number, tonnage, value, average value per ton, and average tonnage of the same craft, but grouped according to material of construction, in contradistinction to the preceding table, in which the grouping is done by ports.

TRAFFIC.

Table 6, "Freight movement in general", contains the receipts, shipments, and excess of one movement over the other, and the total movement of the freight moved on Lake Champlain with the commodities divided into the same comprehensive classes used in the report on the Great Lakes and St. Lawrence river, that is:

Class I—Products of agriculture.
Class II—Products of mines and quarries.
Class III—Other products (such as animal products and lumber).
Class IV—Manufactures, miscellaneous merchandise, and other commodities.

There has been worked out for this table also the percentage of each commodity to the total traffic, whether of receipts, shipments, or combined movements.

Table 7, "Freight movements, by ports and commodities", presents the figures of commodity movement given in the preceding table, allotted to the 8 principal trading points of Lake Champlain.

EARNINGS AND EXPENSE ACCOUNTS.

Table 8, entitled "Financial account in general", is really a balance sheet of the industry of transportation on Lake Champlain, showing as it does the gross earnings, expenses, and net earnings of the operating lake fleet of steamers and sailing vessels, entered for each port of registration.

Table 9, "Expense account in detail", itemizes the sum of gross expenses given in the preceding table under the various heads of port charges, wages, provisions, current repairs, fuel (for the steamers), commissions, insurance, taxes, and office expenses, with two columns for such other running and shore expenses as have not been specified.

Table 10, "Employés and wages", is an analysis of the monthly wages paid on the operating vessels belonging to each port, to all grades of employés from captains to captains' boys, and from first mates to chambermaids, together with the number of persons making up the ordinary crews required as the complement of all operating craft, the number of persons receiving whole or partial employment in the operation of these vessels, the total wages paid out each month, and the average rate of wages paid.

Table 11, entitled "Fuel account" applies, of course, only to operating steamers. These steamers are grouped under the heads of (1) passenger, passenger and freight, and freight steamers, (2) towboats, and (3) miscellaneous. For each of these classes and for each port the number of tons of coal consumed is set down, together with the cost of material.

COMPARATIVE STATISTICS.

Table 12, "Fleets for the 10 years 1880–1889", gives the number and tonnage of all steamers and sailing vessels registered in the customs districts of Lake Champlain for the decade in question; this table as well as the 4 succeeding having been compiled from information furnished this office by the Commissioner of Navigation.

In Table 13 these figures of number and tonnage are made the base for a calculation of averages which are worked out and given for steamers and sailing vessels for the 10 years, while Table 14 gives the fluctuations from the annual average number and the annual average tonnage of all steamers and sailing vessels registered in the customs districts.

Tables 15 and 16 are records of shipbuilding for the decennial period in question, the first giving the number and tonnage of all steamers and sailing vessels built during the 7 years of activity in the decade, and the second furnishing the data for the 4 years in which steamers were built, to show the number and tonnage of all vessels of this kind so built, arranged according to their methods of propulsion—that is, whether propellers or side-wheel steamers.

CONGRESSIONAL APPROPRIATIONS.

Table 17, which concludes the series, gives the amounts appropriated by Congress for the survey, improvement, and maintenance of the harbors of Lake Champlain and of the rivers flowing into it, from the earliest date of appropriation down to and including that of the act of Congress of September, 1890. These sums, so far as the grouping of periods is concerned, are given, first, up to and including 1879; second, from 1880 to 1889, inclusive; third, the appropriations of 1890, and fourth, the total appropriations from first to last.

LOCALITIES.

Before taking up the consideration of what the tables show it will be necessary to explain the various localities mentioned in the different statements. The two places entered on Tables 1, 2, 4, 5, 8, 9, 10, and 11, Burlington, Vermont, and Plattsburg, New York, are the ports of register of the two customs districts of Vermont and Champlain, which latter localities are given in Tables 12, 13, 14, 15, and 16, the former term having been used by the Census agents in collecting their information, and the latter being the term employed in the reports of the Commissioner of Navigation, the two being practically the same. In Table 7 the list of the principal trading points on the lake is given, the traffic returns being a matter entirely outside of custom-house registration, and the list being as follows:

Rouses Point, New York.
Plattsburg, New York.
Ticonderoga, New York.
Whitehall, New York.
Gordons Landing, Vermont.
Burlington, Vermont.
Otter Creek, Vermont.
Swanton, Vermont.

WHAT THE TABLES SHOW.

In the text of the Great Lakes and St. Lawrence river the next step taken after the consideration of "the plan of the tables" was to inquire what the tables show, and no better plan could be adopted for the present article.

VALUES AND TONNAGE.

The information given in Table 1 shows that in the year ended December 31, 1889, the floating equipment of Lake Champlain, exclusive of barges and all other unrigged craft, numbered 47 vessels, having a tonnage of 6,061 tons and a value of $361,300. So far as numbers go the shipping was about equally distributed both between steamers and sailing vessels, and between the 2 ports of registration of Burlington and Plattsburg, the steamers numbering 22 and the sailing vessels 25. The figures of values and tonnage, however, are quite different, for while the tonnage of the steamers was 4,136 tons, that of the sailing vessels was 1,925; and while the value of the 25 sailing vessels was $36,800, that of the steamers amounted to $324,500.

From Tables 2 and 3, which divide the lake fleet into classes indicative of occupation or rig, it is seen that of the 22 steamers 5 were employed as side-wheel passenger carriers, having a gross tonnage of 3,011 tons and a value of $215,000; 4 were propellers carrying both passengers and freight and had a tonnage of 76 tons and a value of $10,000; 6 were tugs, with a gross tonnage of 652 tons and a value of $61,000; there was 1 ferryboat of 5 tons and a value of $1,500, and 3 pleasure yachts with a tonnage of 74 tons and a value of $19,000; leaving 3 unclassified steamers of 318 tons aggregate tonnage and $18,000 value. Of the 25 sailing vessels 22 are seen to be schooners and 3 sloops, the tonnage and value of the schooners being 1,747 tons and $32,700, and the tonnage and value of the sloops being 178 tons and $4,100.

The percentages given in Table 3 furnish several items of interest, the principal one, and the only one that need be noted here, being the preponderance in proportionate tonnage and value of the side-wheel passenger steamers, the 5 steamers so employed representing 49.68 or nearly 50 per cent of the total tonnage on the lake, both sailing vessels and steamers, and 59.51 per cent, or more than one-half of the value, of the Lake Champlain fleet.

MATERIALS OF CONSTRUCTION.

Looking at Tables 4 and 5, which show the relative use of iron and wood as materials of construction, it is seen that of the 47 craft reported on only 6 were of iron, their tonnage being 1,404 tons and their value $109,000, leaving 41 wooden vessels with a tonnage of 4,657 tons and a value of $252,300. When it comes to a question of averages, however, it is found that the average value per ton of the iron vessels was $78 as against $54 per ton of wooden vessels; while the average tonnage of the iron vessels was 234, and that of the wooden vessels 114.

The statistics of freight traffic which are found in Tables 6 and 7 show that during 1889 the total movement by the vessels employed in such operations was 1,760,549 tons; this amount, it should be understood, being the aggregate of the receipts and shipments at the various trading points on the lake—those trading points which were listed in a preceding paragraph.

PORT TRAFFIC AND CARGO TONNAGE.

In considering the traffic on the Great Lakes and St. Lawrence river it was stated to be "a problem in accurate statistics whether the aggregate of receipts and shipments does not show a larger movement than the actual returns of cargo tonnage would do", and a table was prepared (Table 16 in that report) in which there was set down the result of each commodity movement, either receipts or shipments, whichever happened to be the larger, and using this single amount to represent the cargo tonnage. By applying the same rule to the commerce of Lake Champlain it is found that the cargo tonnage amounted to 1,065,368 tons.

PORTS AND COMMODITIES.

In Table 7, which illustrates the freight movement by ports and commodities, the relative importance of these ports is fairly shown. Both as a shipping and receiving point, Whitehall, New York, easily leads, its shipments amounting to 540,000 tons and its receipts to 600,000 tons, a total movement of 1,140,000 tons. Rouses Point, New York, comes next, its receipts being 207,500 tons and its shipments 113,843 tons, making a total of 321,343 tons. The port of third importance is Otter Creek, Vermont, with shipments of 23,000 tons and receipts of 74,000 tons, a total of 97,000 tons. Other than the 3 ports mentioned, Plattsburg, New York, is the only port for which any returns for shipments were made. Table 7 also shows in a fair degree the principal commodities in whose traffic the different ports were engaged, although the reports showed far too much willingness on the part of those making them out to lump the traffic figures under the head of "Unclassified". Taking the 4 principal specified items of coal, iron ore, iron (pig and bloom), and lumber it is found that Plattsburg received the bulk of the coal, 7,875 tons, and that it also shipped iron ore to the amount of 27,135 tons. The business of Rouses Point seems to have principally consisted in the receipts of lumber, its figures standing at 197,500 tons out of a total of 277,223 tons of lumber received at all ports on the lake. Swanton, Vermont, is the only port making returns for the receipt of iron, the amount being 2,125 tons.

The returns of passenger traffic on Lake Champlain were quite unsatisfactory, the alleged reason being that nearly all the passengers were of the excursion class, of whom no record was kept, and indeed the only reports of passenger traffic received were those of 87,139 regular passengers, made by the steamer owners of Burlington, Vermont.

EARNINGS AND EXPENSES.

In Table 8 are given the figures which show how the business of transportation by water paid on Lake Champlain during 1889. The total figures indicate that the gross earnings of the operating mercantile fleet amounted to $172,311, the expenses to $141,599, leaving the net earnings at $30,712. Out of these amounts the steamers made as gross earnings $160,830 and paid out $132,380, leaving a balance of $28,450; while the sailing vessels made as gross earnings $11,481 and paid out $9,219, leaving the net earnings at $2,262.

In Table 9 the total amount of expenses, $141,599 given in Table 8, is reduced to the principal items making it up. The largest item was wages, that expense amounting to $42,239; next to which came fuel (for the steamers), $40,827. Provisions amounted to $16,028; the current repairs to $13,465; the office expenses to $13,445; taxes to $2,475; insurance to $2,094; port charges to $921; commissions to $60; the balance of $10,045 being set down to unspecified running and shore expenses.

In much the same way that the grand total of expenses given in Table 8 was divided into a number of items in Table 9, so the total of wages which formed one of the leading items in Table 9 is analyzed in Table 10, which treats of the monthly wages paid to the employés of those vessels which were in operation during 1889. The apparent contradiction between the statements made in Table 1, which sets the floating equipment of Lake Champlain at 47 vessels, and that made in Table 10, which sets the number of chief officers at 30, is due to the fact that in the one case the fleet referred to includes all registered craft whether in operation or not, while in the other case the report was only made for those vessels which were engaged in commercial operations.

Of these employés the steamer list embraces captains, first and second mates, clerks, first and second engineers, wheelmen, lookouts, watchmen, cooks and assistant cooks, seamen, deck hands, firemen, stewards, waiters, boys, and chambermaids; while the sailing vessel list includes captains, first mates, seamen, and cooks.

The number of each class of employés for the lake fleet is given for both steamers and sailing vessels in a comprehensive total, from which the subjoined summaries, with their calculated averages, are drawn:

STATEMENT SHOWING THE NUMBER OF ALL EMPLOYÉS CONSTITUTING THE ORDINARY CREWS OF THE OPERATING STEAMERS AND SAILING VESSELS ON LAKE CHAMPLAIN, TOGETHER WITH THEIR AGGREGATE AND AVERAGE MONTHLY WAGES.

EMPLOYÉS.	Number employed.	Aggregate of wages for 1 month.	Average monthly wages.
STEAMERS.			
Total	173	$6,769	$39.13
Captains	17	1,603	94.29
First mates	12	555	46.25
Second mates	3	75	25.00
Clerks	2	110	55.00
First engineers	17	1,030	60.59
Second engineers	12	478	39.83
Wheelmen	6	253	42.17
Lookouts	1	16	16.00
Watchmen	3	60	20.00
Cooks	15	439	29.27
Assistant cooks	2	36	18.00
Seamen	6	156	26.00
Deck hands	24	522	21.75
Firemen	28	873	31.18
Stewards	4	248	62.00
Waiters	16	240	15.00
Boys	1	15	15.00
Chambermaids	4	60	15.00
SAILING VESSELS.			
Total	35	1,002	28.63
Captains	13	580	44.62
First mates	5	120	24.00
Seamen	11	210	19.09
Cooks	6	92	15.33

Should a comparison be made between the wages paid on Lake Champlain and those paid on the Great Lakes and St. Lawrence river it will be seen that the average in every case is considerably lower on the smaller sheet of water, the general average being $48.79 in the other locality against $37.36 on Lake Champlain, the detailed averages being as follows:

STATEMENT SHOWING THE AVERAGE MONTHLY WAGES PAID TO ALL CLASSES OF EMPLOYÉS ON THE OPERATING STEAMERS AND SAILING VESSELS ON LAKE CHAMPLAIN, COMPARED WITH THOSE PAID ON THE GREAT LAKES AND ST. LAWRENCE RIVER.

EMPLOYÉS.	Average monthly wages on Lake Champlain.	Average monthly wages on the Great Lakes and St. Lawrence river.
STEAMERS.		
Average monthly wages of all steamer employés.	$39.13	$49.73
Captains	94.29	109.15
First mates	46.25	71.56
Second mates	25.00	58.00
Clerks	55.00	60.25
First engineers	60.59	87.34
Second engineers	39.83	62.24
Wheelmen	42.17	36.01
Lookouts	16.00	33.77
Watchmen	20.00	32.97
Cooks	29.27	51.54
Assistant cooks	18.00	20.98
Seamen	26.00	35.96
Deck hands	21.75	23.70
Firemen	31.18	36.51
Stewards	62.00	50.43
Waiters	15.00	20.44
Boys	15.00	18.30
Chambermaids	15.00	22.39
SAILING VESSELS.		
Average monthly wages of all sailing vessel employés.	$28.63	$46.70
Captains	44.62	75.18
First mates	24.00	52.14
Seamen	19.09	38.39
Cooks	15.33	35.68

Another interesting total of Table 10 shows that while the number of persons making up the ordinary crews of the operating vessels on Lake Champlain in 1889 was 208, there were 269 persons to whom whole or partial employment was given during the same year, and that the total wages paid per working month was $7,771.

FUEL ACCOUNT.

In Table 11 there will be found set down the amounts of coal burned by all the operating mercantile steamers during 1889, together with the cost of the fuel. As was seen when considering Table 9 the cost of coal figures as an item of the expense account to the extent of $40,827, and in the present table it will be found that the amount burned was 10,910 tons; that the passenger and freight steamers burned 5,787 tons, costing $20,831; that the towboats burned 3,400 tons, costing $13,922, and that the miscellaneous steam craft consumed 1,723 tons of coal, costing $6,074.

COMPARATIVE STATISTICS.

As was stated when considering the "Plan of the tables", the comparative statistics found in Tables 12 to 16, inclusive, have been gathered from the reports of the Bureau of Navigation, and before proceeding to consider them it will be well to point out that the difference between the fleet of 1889 reported by the Census Office and that reported by the Commissioner of Navigation, is due to the fact that in the Commissioner's figures there are included certain unrigged craft which have not been given a place in the census report, and to a somewhat different method of classification. The totals of the Commissioner's report are 53 craft, with a tonnage of 6,490.85 tons, made up of 19 steamers, with a tonnage of 4,102.38 tons, and 34 sailing vessels, with a tonnage of 2,388.47 tons, while the total of Table 1 places the Champlain fleet at 47 craft, with a tonnage of 6,061 tons, made up of 22 steamers, with a tonnage of 4,136 tons, and 25 sailing vessels, with a tonnage of 1,925 tons. The yearly details of Table 12 form an interesting record, but the pith of the subject is presented in the recapitulation for the 10 years. No clearer presentation of the gradual change in the class of the craft in use on the lake can be made than is found in this recapitulation, for while the number of the vessels composing the fleet has dropped from 63 in 1880 to 53 in 1889, the tonnage has increased from 5,247.86 to 6,490.85 tons. The explanation of the increased tonnage is found in the statistics of the two columns treating respectively of steamers and sailing vessels, for here it is seen that while the sailing vessels have dropped from 44, with a tonnage of 2,667.62 tons, in 1880 to 34, with a tonnage of 2,388.47 tons, in 1889, the steamers of 1880, which numbered 19, had a tonnage of 2,580.24 tons, while the steamers in 1889, with the same number, 19, had a tonnage of 4,102.38 tons.

CHANGES IN EQUIPMENT.

In Table 13 these changes in number and tonnage are further treated of, the statement showing that in 1880 the average tonnage of the steamers of the Vermont district was 219 tons, while in 1889 it had risen to 345 tons and that the tonnage of the steamers of the Champlain district had risen from 87 tons in 1880 to 100 tons in 1889. Further, that while the average tonnage of the sailing vessels of the Champlain district remained stationary at 64 tons, that of the sailing vessels of the Vermont district had risen from 55 tons to 85 tons; the average tonnage of the combined fleet rising from 71 tons for the Champlain district in 1880 to 75 tons in 1889, and from 103 tons for the Vermont district in 1880 to 208 tons in 1889.

Table 14 is but a continuation, or rather an elaboration of Table 13; presenting as it does the years in which the number and tonnage of the lake fleet ran the highest above and the lowest below the average standard. The great changes, as has been said, are observable in the district of Vermont. Here the annual average number of vessels registered was 23, while the annual average tonnage was 3,416 tons; the year of highest registered number was 1881, when the number was 30, while the year of highest registered tonnage was 1888, when the tonnage was 4,169 tons. Conversely it is seen that the year of lowest registered number was 1889 with 19 registered vessels, while the year of lowest registered tonnage was 1880, when the tonnage was 2,469 tons. The year in which the number of registrations was closest to the average was 1883, when the number was 23, and the year in which the registered tonnage was closest to the average was 1882, when it was 3,402 tons. The fluctuation of number, by the by, was 11 and that of tonnage was 1,700 tons. The annual average number of registrations for the district of Champlain was 36, the fluctuation being 9; while the annual average registered tonnage was 2,645 tons, with a fluctuation of 614 tons.

SHIPBUILDING.

In Table 15, which gives the Commissioner's report of the shipbuilding in the two districts of Champlain and Vermont for the 10 years 1880–1889, additional facts are found explaining the extensive fluctuations in the registration of the Vermont district. From this table the following summary can be collated:

STATEMENT SHOWING THE NUMBER AND TONNAGE OF STEAMERS AND SAILING VESSELS BUILT IN THE TWO DISTRICTS OF CHAMPLAIN AND VERMONT DURING THE 10 YEARS 1880–1889.

DISTRICTS.	STEAMERS.		SAILING VESSELS.		TOTAL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Both districts	6	1,484.20	7	546.66	13	2,030.86
Champlain	2	199.93	5	415.30	7	615.23
Vermont	4	1,284.27	2	131.36	6	1,415.63

Table 16 is devoted to an analysis of steamer building, with especial reference to the methods of propulsion adopted. The whole number of steamers built in the 10 years was 6, with a tonnage of 1,484.20, and of these, as the recapitulation shows, 4 were propellers, with a tonnage of 243.12 tons, and 2 were side-wheel steamers, with a tonnage of 1,241.08 tons. No stern-wheel steamers were built.

CONGRESSIONAL APPROPRIATIONS.

The earliest appropriation made by the government for the improvement of Lake Champlain was in 1836, when improvements were effected at Burlington, Plattsburg, and Whitehall harbors, and when a general survey of the lake was made, the appropriations for that year amounting to $620,352. Since that time other localities have been improved and other amounts have been appropriated, the total amount up to and including the act of Congress of September, 1890, being $1,123,352, as is shown in Table 17, while the subjoined descriptive list shows what has been done under the appropriations:

Burlington harbor.—The first project for the improvement of this harbor was probably adopted in 1836. Modifications of the original plan have been made from time to time so as to afford adequate protection to the increasing commercial and shipping interests of the harbor. The improvements now embrace a breakwater of good dimensions and a well protected entrance.

Gordons landing.—The object of the improvement here has been the construction of a breakwater out to the 16-foot curve for the protection of the landing.

Great Chazy river.—The appropriation made by the Congressional act of 1890 was for the purpose of improving this river from the mouth, on Lake Champlain, to Champlain village.

Otter creek.—The project of this improvement adopted in 1872 has been the formation of a channel from Vergennes to Lake Champlain of good navigable width, and with 8 feet of water.

Plattsburg harbor.—The improvements here consisted of a breakwater running out some 1,200 feet, built for the protection of the steamboat docks.

Rouses point.—Like nearly all the improvements on Lake Champlain, that at this place has consisted of the erection of a curved breakwater 2,000 feet long.

Survey.—This survey was made in 1836 and 1838, the principal localities being the Narrows and the channel between North and South Hero islands.

Swanton harbor.—Swanton harbor has been really formed by the construction of protecting breakwaters inclosing a portion of the lake.

Ticonderoga river.—The project of this improvement, adopted in 1881, was the formation of a channel of navigable width and a least depth of 8 feet at low water between the falls of Ticonderoga village and Lake Champlain, a distance of 2 miles.

Whitehall harbor.—Little has been done in this vicinity except a survey.

EQUIPMENT, OCCUPATION, AND CONSTRUCTION.

TABLE **1.**—EQUIPMENT OF FLEETS IN GENERAL—NUMBER, TONNAGE, AND VALUE OF ALL STEAMERS AND SAILING VESSELS FORMING THE LAKE FLEET, AND CREDITED TO THEIR PORTS OF REGISTRATION.

PORTS.	TOTAL OF ALL CRAFT.			STEAMERS.			SAILING VESSELS.		
	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.	Number.	Gross tonnage.	Valuation.
Total for lake	47	6,061	$361,300	22	4,136	$324,500	25	1,925	$36,800
Burlington, Vermont	21	3,880	254,100	12	3,128	240,500	9	752	13,600
Plattsburg, New York	26	2,181	107,200	10	1,008	84,000	16	1,173	23,200

TABLE **2.**—EQUIPMENT OF FLEETS BY CLASSES—NUMBER, TONNAGE, AND VALUE OF THE LAKE STEAMERS AND SAILING VESSELS REPORTED ON IN THE PRECEDING TABLE, BUT DIVIDED INTO CLASSES INDICATIVE OF OCCUPATION AND RIG.

PORTS.	TOTAL EQUIPMENT.			STEAMERS.												SAILING VESSELS.					
				Side-wheel passenger.			Propellers carrying both passengers and freight.			Tugs.			All other classes.			Schooners.			Sloops.		
	No.	Gross tonnage.	Valuation.	No.	Gross tonnage.	Valuation.	No.	Gross tonnage.	Valuation.	No.	Gross tonnage.	Valuation.	No.	Gross tonnage.	Valuation.	No.	Gross tonnage.	Valuation.	No.	Gross tonnage.	Valuation.
Total	47	6,061	$361,300	5	3,011	$215,000	4	76	$10,000	6	652	$61,000	7	397	$38,500	22	1,747	$32,700	3	178	$4,100
Burlington, Vermont.	21	3,880	254,100	5	3,011	215,000	3	38	5,000	....	......	....	4	79	20,500	8	709	12,900	1	43	700
Plattsburg, New York.	26	2,181	107,200	....	......	....	1	38	5,000	6	652	61,000	3	318	18,000	14	1,038	19,800	2	135	3,400

TABLE **3.**—PERCENTAGES OF TONNAGE AND VALUATION—NUMBER, GROSS AND NET TONNAGE, ESTIMATED CARRYING CAPACITY, VALUATION, AND VALUE PER GROSS TON OF ALL STEAMERS AND SAILING VESSELS, ARRANGED BY PERCENTAGES OF TONNAGE AND VALUATION APPLIED TO ALL CRAFT, GROUPED BY OCCUPATIONS.

CLASSES OF VESSELS.	Number.	TONNAGE.				VALUATION.		
		Gross.	Percentage of total tonnage on lake.	Net.	Estimated carrying capacity.	Commercial.	Percentage of valuation on lake.	Per ton gross.
All classes	47	6,061	100.00	4,724	7,475	$361,300	100.00	$60
Steamers:								
Side-wheel passenger	5	3,011	49.68	2,344	3,449	215,000	59.51	71
Propellers carrying both passengers and freight	4	76	1.25	39	19	10,000	2.77	132
Tugs	6	652	10.76	325	358	61,000	16.88	94
Ferry	1	5	0.08	5	2	1,500	0.42	300
Pleasure yachts	3	74	1.22	46	24	19,000	5.26	257
Unclassified steam vessels	3	318	5.25	179	86	18,000	4.98	57
Sailing vessels:								
Schooners	22	1.747	28.82	1,616	3,220	32,700	9.05	19
Sloops	3	178	2.94	170	323	4,100	1.13	23

TABLE **4.**—CONSTRUCTION BY LOCALITIES—MATERIAL, NUMBER, TONNAGE, VALUE IN GENERAL, VALUE PER TON, AND AVERAGE TONNAGE OF ALL THE LAKE FLEET ENTERED FOR EACH PORT.

LAKES AND PORTS.	Material.	Number.	Gross tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Lake Champlain		47	6,061	$361,300	$60	129
Burlington, Vermont	Iron	1	743	55,000	74	743
	Wood	20	3,137	199,100	63	157
Plattsburg, New York	Iron	5	661	54,000	82	132
	Wood	21	1,520	53,200	35	72

EQUIPMENT, OCCUPATION, AND CONSTRUCTION—Continued.

TABLE 5.—CONSTRUCTION BY MATERIALS—MATERIAL, NUMBER, TONNAGE, GENERAL VALUE AND AVERAGES OF VALUE, AND TONNAGE OF ALL THE LAKE FLEET ENTERED FOR EACH PORT, GROUPED TO SHOW THE TOTALS FOR EACH MATERIAL OF CONSTRUCTION, WHETHER IRON OR WOOD.

LAKES AND PORTS.	Number.	Gross tonnage.	Valuation.	Average valuation per ton.	Average tonnage.
Total Lake Champlain	47	6,061	$361,300	$60	129
IRON.					
Lake Champlain	6	1,404	109,000	78	234
Burlington, Vermont	1	743	55,000	74	743
Plattsburg, New York	5	661	54,000	82	132
WOOD.					
Lake Champlain	41	4,657	252,300	54	114
Burlington, Vermont	20	3,137	199,100	63	157
Plattsburg, New York	21	1,520	53,200	35	72

TRAFFIC OPERATIONS.

TABLE 6.—FREIGHT MOVEMENT IN GENERAL—RECEIPTS, SHIPMENTS, TOTAL MOVEMENT, EXCESS OF RECEIPTS OVER SHIPMENTS, AND EXCESS OF SHIPMENTS OVER RECEIPTS OF THE FREIGHT MOVEMENT, CLASSED BY PRINCIPAL PRODUCTS, TOGETHER WITH PERCENTAGES OF TRAFFIC APPLIED TO THE COMMODITIES.

COMMODITIES.	RECEIPTS.		SHIPMENTS.		TOTAL MOVEMENT.		Excess of receipts over shipments. (Tons.)	Excess of shipments over receipts. (Tons.)
	Amount in tons.	Per cent of total traffic.	Amount in tons.	Per cent of total traffic.	Amount in tons.	Per cent of total traffic.		
Total	1,047,858	100.00	712,691	100.00	1,760,549	100.00	335,167	
Class I.—Products of agriculture								
Wheat								
Corn								
Other grains								
Mill products								
All other farm products								
Class II.—Products of mines and quarries	9,625	0.92	27,135	3.81	36,760	2.09		17,510
Coal	9,625	0.92			9,625	0.55	9,625	
Iron ore			27,135	3.81	27,135	1.54		27,135
Stone, of all kinds								
Salt								
Other products of mines and quarries								
Class III.—Other products	277,223	26.46	8,663	1.21	285,886	16.24	268,560	
Animal products								
Lumber	277,223	26.46	8,663	1.21	285,886	16.24	268,560	
Class IV.—Manufactures, miscellaneous merchandise, and other commodities.	761,010	72.62	676,893	94.98	1,437,903	81.67	84,117	

TABLE 7.—FREIGHT MOVEMENT BY PORTS AND COMMODITIES—RECEIPTS, SHIPMENTS, AND TOTAL MOVEMENT OF THE LAKE FREIGHT, GROUPED ACCORDING TO AN EXTENDED LIST OF COMMODITIES, AND ALLOTTED TO THE EIGHT PRINCIPAL PORTS OF TRADE.

LAKES AND PORTS.	Total.	PRODUCTS OF MINES AND QUARRIES.		Lumber.	Manufactures of iron, pig and bloom.	Miscellaneous merchandise and other commodities.
		Coal and coke.	Iron ore.			
Total receipts and shipments	1,760,549	9,625	27,135	285,886	2,125	1,435,778
Lake Champlain:						
Rouses Point, New York	321,343			197,500		123,843
Gordons Landing, Vermont	1,500					1,500
Plattsburg, New York	43,848	7,875	27,135	8,663		175
Burlington, Vermont	79,823			79,723		100
Otter Creek, Vermont	97,000					97,000
Ticonderoga, New York	65,000					65,000
Whitehall, New York	1,140,000					1,140,000
Swanton, Vermont	12,035	1,750			2,125	8,160
Receipts	1,047,858	9,625		277,223	2,125	758,885
Rouses Point, New York	207,500			197,500		10,000
Gordons Landing, Vermont	1,500					1,500
Plattsburg, New York	8,000	7,875				125
Burlington, Vermont	79,823			79,723		100
Otter Creek, Vermont	74,000					74,000
Ticonderoga, New York	65,000					65,000
Whitehall, New York	600,000					600,000
Swanton, Vermont	12,035	1,750			2,125	8,160
Shipments	712,691		27,135	8,663		676,893
Rouses Point, New York	113,843					113,843
Gordons Landing, Vermont						
Plattsburg, New York	35,848		27,135	8,663		50
Burlington, Vermont						
Otter Creek, Vermont	23,000					23,000
Ticonderoga, New York						
Whitehall, New York	540,000					540,000
Swanton, Vermont						

EARNINGS AND EXPENSE ACCOUNTS.

Table 8.—FINANCIAL ACCOUNT IN GENERAL—GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF ALL THE OPERATING LAKE CRAFT, GIVEN BY STEAMERS AND SAILING VESSELS, AND ENTERED FOR EACH PORT OF REGISTER.

STEAMERS AND SAILING VESSELS.

LAKES AND PORTS.	Gross earnings.	Expenses.	Net earnings.
Lake Champlain	$172, 311	$141, 599	$30, 712
Burlington, Vermont	93, 971	75, 302	18, 669
Plattsburg, New York	78, 340	66, 297	12, 043
STEAMERS.			
Lake Champlain	160, 830	132, 380	28, 450
Burlington, Vermont	89, 860	72, 602	17, 258
Plattsburg, New York	70, 970	59, 778	11, 192
SAILING VESSELS.			
Lake Champlain	11, 481	9, 219	2, 262
Burlington, Vermont	4, 111	2, 700	1, 411
Plattsburg, New York	7, 370	6, 519	851

Table 9.—EXPENSE ACCOUNT IN DETAIL—ITEMIZED EXPENSE ACCOUNT OF ALL THE OPERATING LAKE CRAFT, GIVEN BY STEAMERS AND SAILING VESSELS, SUBDIVIDED INTO THE VARIOUS ITEMS CONSTITUTING THE RUNNING AND SHORE EXPENSES, AND ENTERED FOR EACH PORT OF REGISTER.

STEAMERS AND SAILING VESSELS.

LAKE AND PORTS.	Total expenses.	Port charges.	Wages.	Provisions.	Current repairs.	Fuel for the steamers.	Other running expenses.	Commission.	Insurance.	Taxes.	Office expenses.	Other shore expenses.
Lake Champlain	$141, 599	$921	$42, 239	$16.028	$13, 465	$40, 827	$8, 938	$60	$2, 094	$2, 475	$13, 445	$1, 107
Burlington, Vermont	75, 302	7	25, 737	12, 283	7, 072	20, 313	4, 158	....	1, 476	1, 596	2, 000	660
Plattsburg, New York	66, 297	914	16. 502	3, 745	6, 393	20, 514	4, 780	60	618	879	11, 445	447
STEAMERS.												
Lake Champlain	132, 380	467	36, 619	14, 524	12, 346	40, 827	8, 651	....	2, 054	2, 450	13, 445	997
Burlington, Vermont	72, 602	7	23, 922	11, 798	6. 868	20, 313	4. 012	....	1, 436	1, 586	2, 000	660
Plattsburg, New York	59. 778	460	12, 697	2, 726	5. 478	20. 514	4, 639	....	618	864	11, 445	337
SAILING VESSELS.												
Lake Champlain	9, 219	454	5, 620	1, 504	1, 119	....	287	60	40	25	....	110
Burlington, Vermont	2, 700	....	1, 815	485	204	....	146	....	40	10	....	....
Plattsburg, New York	6, 519	454	3, 805	1, 019	915	....	141	60	....	15	....	110

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 10.—EMPLOYÉS AND WAGES--MONTHLY WAGES PAID TO ALL EMPLOYÉS OF THE OPERATING LAKE CRAFT ENTERED FOR STEAMERS AND SAILING VESSELS, AND ALLOTTED TO EACH PORT OF REGISTER.

STEAMERS AND SAILING VESSELS.

LAKE AND PORTS.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.		WATCHMEN.		COOKS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Lake Champlain	30	$2,183	17	$675	3	$75	2	$110	17	$1,030	12	$478	6	$253	1	$16	3	$60	21	$531
Burlington, Vermont.	16	1,317	10	410	3	75	2	110	12	780	7	278	5	203	1	16	3	60	14	398
Plattsburg, New York.	14	866	7	265	....	....	....	....	5	250	5	200	1	50	....	....	....	....	7	133

LAKE AND PORTS.	ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.		BOYS.		CHAMBERMAIDS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Lake Champlain	2	$36	17	$366	24	$522	28	$873	4	$248	16	$240	1	$15	4	$60	208	269	$7,771	$37.36
Burlington, Vermont.	2	36	9	221	19	387	18	569	4	248	16	240	1	15	4	60	146	175	5,423	37.14
Plattsburg, New York.	....	....	8	145	5	135	10	304	....	....	....	....	....	....	....	....	62	94	2,348	37.87

STEAMERS.

LAKE AND PORTS.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.		WATCHMEN.		COOKS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Lake Champlain	17	$1,603	12	$555	3	$75	2	$110	17	$1,030	12	$478	6	$253	1	$16	3	$60	15	$439
Burlington, Vermont.	12	1,157	8	355	3	75	2	110	12	780	7	278	5	203	1	16	3	60	10	332
Plattsburg, New York.	5	446	4	200	....	....	....	....	5	250	5	200	1	50	....	....	....	....	5	107

LAKE AND PORTS.	ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.		BOYS.		CHAMBERMAIDS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate of wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.				
Lake Champlain	2	$36	6	$156	24	$522	28	$873	4	$248	16	$240	1	$15	4	$60	173	216	$6,769	$39.13
Burlington, Vermont.	2	36	6	156	19	387	18	569	4	248	16	240	1	15	4	60	133	158	5,077	38.17
Plattsburg, New York.	....	....	....	....	5	135	10	304	....	....	....	....	....	....	....	....	40	58	1,692	42.30

EARNINGS AND EXPENSE ACCOUNTS—Continued.

TABLE 10.—EMPLOYÉS AND WAGES—Continued.

SAILING VESSELS.

LAKE AND PORTS.	CAPTAINS.		FIRST MATES.		SECOND MATES.		CLERKS.		FIRST ENGINEERS.		SECOND ENGINEERS.		WHEELMEN.		LOOKOUTS.		WATCHMEN.		COOKS.	
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.
Lake Champlain	13	$580	5	$120															6	$92
Burlington, Vermont.	4	160	2	55															4	66
Plattsburg, New York.	9	420	3	65															2	26

LAKE AND PORTS.	ASSISTANT COOKS.		SEAMEN.		DECK HANDS.		FIREMEN.		STEWARDS.		WAITERS.		BOYS.		CHAMBERMAIDS.		Number persons making ordinary crew.	Number persons given employment during year.	Total wages paid per month.	Average rate wages per month.
	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Monthly wages.	No.	Month ly wages.	No.	Monthly wages.				
Lake Champlain			11	$210													35	53	$1,002	$28.63
Burlington, Vermont.			3	65													13	17	346	26.62
Plattsburg, New York.			8	145													22	36	656	29.82

TABLE 11.—FUEL ACCOUNT—AMOUNT AND VALUE OF THE COAL USED FOR FUEL ON ALL THE OPERATING LAKE STEAMERS, WITH SEPARATE ENTRIES UNDER THE HEADS OF CLASSIFIED OCCUPATIONS.

LAKES AND PORTS.	Tons of coal.	Cost of fuel.	PASSENGER, PASSENGER AND FREIGHT, AND FREIGHT.		TOWBOATS.		MISCELLANEOUS.	
			Coal, in tons.	Value.	Coal, in tons.	Value.	Coal, in tons.	Value.
Lake Champlain	10,910	$40,827	5,787	$20,831	3,400	$13,922	1,723	$6,074
Burlington, Vermont	5,862	20,313	5,287	18,831			575	1,482
Plattsburg, New York	5,048	20,514	500	2,000	3,400	13,922	1,148	4,592

COMPARATIVE STATISTICS.

TABLE **12.**—FLEETS FOR THE TEN YEARS, 1880-1889—NUMBER AND TONNAGE OF ALL STEAMERS AND SAILING VESSELS REGISTERED IN THE CUSTOMS DISTRICTS OF LAKE CHAMPLAIN FOR THE DECADE 1880-1889.

CUSTOMS DISTRICTS.	1880						1881					
	TOTAL.		STEAMERS.		SAILING VESSELS.		TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	63	5, 247. 86	19	2, 580. 24	44	2, 667. 62	67	6, 028. 15	18	2, 863. 85	49	3, 164. 30
Vermont, Vermont	24	2, 468. 88	7	1, 531. 02	17	937. 86	30	3, 333. 40	8	1, 901. 15	22	1, 432. 25
Champlain, New York	39	2, 778. 98	12	1, 049. 22	27	1, 729. 76	37	2, 694. 75	10	962. 70	27	1, 732. 05

CUSTOMS DISTRICTS.	1882						1883					
	TOTAL.		STEAMERS.		SAILING VESSELS.		TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	60	5, 829. 52	19	3, 289. 20	41	2, 540. 32	60	6, 104. 64	19	3, 384. 95	41	2, 719. 69
Vermont, Vermont	28	3, 402. 04	11	2, 422. 03	17	980. 01	23	3, 458. 67	7	2, 308. 30	16	1, 150. 37
Champlain, New York	32	2, 427. 48	8	867. 17	24	1, 560. 31	37	2, 645. 97	12	1, 076. 65	25	1, 569. 32

CUSTOMS DISTRICTS.	1884						1885					
	TOTAL.		STEAMERS.		SAILING VESSELS.		TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	60	6, 206. 98	21	3, 493. 94	39	2, 713. 04	61	6, 239. 26	21	3, 493. 94	40	2, 745. 32
Vermont, Vermont	21	3, 393. 78	8	2, 318. 41	13	1, 075. 37	21	3, 380. 12	8	2, 318. 41	13	1, 061. 71
Champlain, New York	39	2, 813. 20	13	1, 175. 53	26	1, 637. 67	40	2, 859. 14	13	1, 175. 53	27	1, 683. 61

CUSTOMS DISTRICTS.	1886						1887					
	TOTAL.		STEAMERS.		SAILING VESSELS.		TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	62	6, 276. 96	22	3, 531. 64	40	2, 745. 32	52	5, 600. 31	18	3, 188. 55	34	2, 411. 76
Vermont, Vermont	21	3, 329. 59	9	2, 333. 92	12	995. 67	20	3, 266. 57	9	2, 333. 92	11	932. 65
Champlain, New York	41	2, 947. 37	13	1, 197. 72	28	1, 749. 65	32	2, 333. 74	9	854. 63	23	1, 479. 11

CUSTOMS DISTRICTS.	1888						1889					
	TOTAL.		STEAMERS.		SAILING VESSELS.		TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	54	6, 581. 44	19	4, 102. 38	35	2, 479. 06	53	6, 490. 85	19	4, 102. 38	34	2, 388. 47
Vermont, Vermont	22	4, 169. 12	9	3, 105. 63	13	1, 063. 49	19	3, 958. 23	9	3, 105. 63	10	852. 60
Champlain, New York	32	2, 412. 32	10	996. 75	22	1, 415. 57	34	2, 532. 62	10	996. 75	24	1, 535. 87

RECAPITULATION.

YEARS.	TOTAL.		STEAMERS.		SAILING VESSELS.		YEARS.	TOTAL		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.		Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1880	63	5, 247. 86	19	2, 580. 24	44	2, 667. 62	1885	61	6, 239. 26	21	3, 493. 94	40	2, 745. 32
1881	67	6, 028. 15	18	2, 863. 85	49	3, 164. 30	1886	62	6, 276. 96	22	3, 531. 64	40	2, 745. 32
1882	60	5, 829. 52	19	3. 289. 20	41	2, 540. 32	1887	52	5, 600. 31	18	3, 188. 55	34	2, 411. 76
1883	60	6, 104. 64	19	3, 384. 95	41	2, 719. 69	1888	54	6, 581. 44	19	4, 102. 38	35	2, 479. 06
1884	60	6, 206. 98	21	3, 493. 94	39	2, 713. 04	1889	53	6, 490. 85	19	4, 102. 38	34	2, 388. 47

COMPARATIVE STATISTICS—Continued.

TABLE 13.—VESSEL TONNAGES FOR THE 10 YEARS, 1880–1889—NUMBER, AGGREGATE AND AVERAGE TONNAGE OF ALL STEAMERS AND SAILING VESSELS REGISTERED AT THE CUSTOMS DISTRICTS OF LAKE CHAMPLAIN FOR THE DECADE 1880–1889.

STEAMERS.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Vermont, Vermont	7	1,531	219	8	1,901	238	11	2,422	220	7	2,308	330	8	2,319	290
Champlain, New York	12	1,049	87	10	963	[illegible]	8	867	108	12	1,077	90	13	1,175	90

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Vermont, Vermont	8	2,318	290	9	2,334	259	9	2,334	259	9	3,106	345	9	3,106	345
Champlain, New York	13	1,175	90	13	1,198	92	9	854	95	10	997	100	10	997	100

SAILING VESSELS.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Vermont, Vermont	17	938	55	22	1,432	65	17	980	58	16	1,151	72	13	1,075	83
Champlain, New York	27	1,730	64	27	1,732	64	24	1,561	65	25	1,569	63	26	1,638	63

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Vermont, Vermont	13	1,062	82	12	996	83	11	933	85	13	1,063	82	10	852	85
Champlain, New York	27	1,684	62	28	1,749	63	23	1,479	64	22	1,415	64	24	1.536	64

STEAMERS AND SAILING VESSELS.

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Vermont, Vermont	24	2,469	103	30	3,333	111	28	3,402	122	23	3,459	150	21	3,394	162
Champlain, New York	39	2,779	71	37	2,695	73	32	2,428	76	37	2,646	72	39	2,813	72

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
Vermont, Vermont	21	3,380	161	21	3,330	159	20	3,267	163	22	4,169	190	19	3,958	208
Champlain, New York	40	2,859	71	41	2'947	72	32	2,333	73	32	2,412	75	34	2,533	75

COMPARATIVE STATISTICS—Continued.

TABLE 14.—TONNAGE FLUCTUATIONS FOR THE 10 YEARS, 1880–1889—AVERAGE ANNUAL NUMBER AND TONNAGE OF ALL STEAMERS AND SAILING VESSELS REGISTERED AT THE CUSTOMS DISTRICTS OF LAKE CHAMPLAIN FOR THE DECADE 1880–1889, TOGETHER WITH THE INDICATED YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION.

STEAMERS.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Vermont, Vermont	9	1882	11	1880	7	1886	9	4	2,368	1888	3,106	1880	1,531	1886	2,334	1,575
Champlain, New York	11	1884	13	1882	8	1880	12	5	1,035	1886	1,198	1887	854	1880	1,049	344

SAILING VESSELS.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Vermont, Vermont	14	1881	22	1889	10	1884	13	12	1,048	1881	1,432	1889	852	1885	1,062	580
Champlain, New York	25	1886	28	1888	22	1883	25	6	1,609	1886	1,749	1888	1,415	1884	1,638	334

STEAMERS AND SAILING VESSELS.

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
Vermont, Vermont	23	1881	30	1889	19	1883	23	11	3,416	1888	4,169	1880	2,469	1882	3,402	1,700
Champlain, New York	36	1886	41	1882	32	1881	37	9	2,645	1886	2.947	1887	2,333	1883	2,646	614

TABLE 15.—SHIPBUILDING DURING THE 10 YEARS, 1880–1889 (GENERAL)—NUMBER AND TONNAGE OF ALL STEAMERS AND SAILING VESSELS BUILT IN THE CUSTOMS DISTRICTS OF LAKE CHAMPLAIN FOR THE DECADE 1880–1889.

YEARS.	CUSTOMS DISTRICTS.	STEAMERS.		SAILING VESSELS.		YEARS.	CUSTOMS DISTRICTS.	STEAMERS.		SAILING VESSELS.	
		Number.	Tonnage.	Number.	Tonnage.			Number.	Tonnage.	Number.	Tonnage.
1880	Champlain, New York	2	199.93	1	20.39	1886	Vermont, Vermont	1	37.70		
1882	Vermont, Vermont	2	503.82			1887	Champlain, New York			1	98.71
1883	Champlain, New York			3	296.20	1888	Vermont, Vermont	1	742.75		
1885	Vermont, Vermont			2	131.36						

RECAPITULATION.

YEARS.	TOTAL.		STEAMERS.		SAILING VESSELS.		YEARS.	TOTAL.		STEAMERS.		SAILING VESSELS.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.		Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	13	2,030.86	6	1,484.20	7	546.66							
							1885	2	131.36			2	131.36
1880	3	220.32	2	199.93	1	20.39	1886	1	37.70	1	37.70		
1882	2	503.82	2	503.82			1887	1	98.71			1	98.71
1883	3	296.20			3	296.20	1888	1	742.75	1	742.75		

COMPARATIVE STATISTICS—Continued.

TABLE **16.**—SHIPBUILDING DURING THE 10 YEARS, 1880–1889 (STEAMERS)—NUMBER AND TONNAGE OF ALL STEAMERS BUILT IN THE CUSTOMS DISTRICTS OF LAKE CHAMPLAIN FOR THE DECADE 1880–1889, TOGETHER WITH DATA SHOWING THE NUMBER AND TONNAGE OF PROPELLER, SIDE-WHEEL, AND STERN-WHEEL STEAMERS BUILT EACH YEAR IN EACH DISTRICT.

YEARS.	CUSTOMS DISTRICTS.	PROPELLER.		SIDE-WHEEL.	
		Number.	Tonnage.	Number.	Tonnage.
1880	Champlain, New York	2	199.93		
1882	Vermont, Vermont	1	5.49	1	498.33
1886	Vermont, Vermont	1	37.70		
1888	Vermont, Vermont			1	742.75

RECAPITULATION.

YEARS.	ALL STEAMERS.		PROPELLER.		SIDE-WHEEL.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	6	1,484.20	4	243.12	2	1,241.08
1880	2	199.93	2	199.93		
1882	2	503.82	1	5.49	1	498.33
1886	1	37.70	1	37.70		
1888	1	742.75			1	742.75

CONGRESSIONAL APPROPRIATIONS.

TABLE **17.**—APPROPRIATIONS BY LOCALITIES—CONGRESSIONAL APPROPRIATIONS FOR THE SURVEY, IMPROVEMENT, AND MAINTENANCE OF THE HARBORS OF LAKE CHAMPLAIN, AND OF THE RIVERS FLOWING INTO IT, FROM THE EARLIEST DATE OF APPROPRIATION TO 1890, INCLUSIVE, GIVEN BY LOCALITIES AND YEARS.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress September, 1890.	Total appropriations up to date.
Lake Champlain		$709,352	$324,000	$90,000	$1,123,352
Burlington, Vermont	1836	426,172	135,750	20,000	581,922
Great Chazy river, New York	1890			10,000	10,000
Gordons landing, Vermont	1880		28,750	6,000	34,750
Otter creek, Vermont	1872	28,000	8,500	5,000	41,500
Plattsburg, New York	1836	140,180	13,000	32,000	185,180
Rouses Point, New York	1884		68,500	15,000	83,500
Survey of Lake Champlain, Vermont	1836	21,000	55,000		76,000
Swanton harbor, Vermont	1873	61,000	9,500		70,500
Ticonderoga river, New York	1881		5,000	2,000	7,000
Whitehall harbor, New York	1836	33,000			33,000

TRANSPORTATION ON THE RIVERS OF THE MISSISSIPPI VALLEY.

TRANSPORTATION ON THE RIVERS OF THE MISSISSIPPI VALLEY.

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The rivers from which statistics of the transportation of freight and passengers have been secured for this report for the year ended December 30, 1889, are, roundly speaking, the Mississippi, the Missouri, and the Ohio, with their respective tributaries. A single entry has been made of the Red River of the North because of its geographical location. In grouping these streams according to what may be called commercial divisions, the Mississippi has been divided into the Upper and Lower Mississippi, with Saint Louis as the dividing point, and with the Missouri set down as one of the tributaries of the Upper Mississippi, while the Ohio has been separately considered. In the census report for 1880 a somewhat different division was carried out. The Mississippi was similarly divided and the Ohio was also treated separately, but the Missouri and its tributaries were given an individual report, and also included the business of the Red River of the North. These differing divisions are not allowed, however, to stand as difficulties in comparison, because in all the comparative tables which are presented in this report the returns for 1889 are grouped to correspond with the returns for 1880, a statement which will explain certain other differences which appear between the 1889 returns in the comparative tables for 1880 and 1889 and those which present the positive business of the latter year.

The tributaries which are put down in the 1889 tables as belonging to the 3 divisions of the Upper Mississippi, the Lower Mississippi, and the Ohio are those from which the principal reports of transportation have been made. Thus, the rivers which are considered as being the chief commercial tributaries of the Upper Mississippi, and which make up what is styled the Upper Mississippi system, are the Saint Croix, the Chippewa, the Illinois, the Missouri, the Osage, and the Gasconade. Those which make up the Lower Mississippi system are the White, the Arkansas, the Yazoo, the Washita, and the Red; and those which make up the Ohio system are the Allegheny, the Monongahela, the Muskingum, the Little Kanawha, the Great Kanawha, the Big Sandy, the Kentucky, the Green, the Wabash, the Cumberland, and the Tennessee. It is not to be understood from this that these are the only streams on which a transportation business was done in 1889 or from which a report of operations was received, but only as being convenient and comprehensive streams whose names are sufficiently indicative of their district. The report of the Monongahela, for example, includes all that was done on itself, the Cheat, and the Buckhannon; and the report of the Tennessee includes the business done on itself, the Clinch, the Hiwassee, the Caney fork, and the French Broad. The list of these tributaries and subtributaries on which a transportation business was done in 1889 is such a long one that a separate report from each would be too bulky and intricate for present statistical purposes, but those curious in the matter can refer to the tables and diagram printed with that portion of this report which refers to congressional appropriations made for all the navigable streams of the Mississippi valley, and to that portion of this text in which these tables and diagram are explained at length.

RIVERS OF ORIGIN.

Perhaps no better place can be found than this in which to state that while Saint Louis is styled the dividing point between the Upper and Lower Mississippi, the business of that port is allotted as follows: the business of the vessels coming into that port over the Upper Mississippi or the Ohio is credited respectively to those rivers; but all the business of the vessels leaving that port for any river is credited to the Lower Mississippi, as is the business of those vessels trading locally at that port. This is done in pursuance of the plan which has been adopted to credit to every stream wherever possible such business as has its origin thereon, no matter whether the finality of the operation was on that stream or some other; that is, a steamer carrying freight from Pittsburg to Saint Louis is credited as an operating craft on the Ohio, as is of course a steamer trading between Pittsburg and Cincinnati. In the same way the operations of a steamer trading between Burlington and Saint Louis are credited to the Upper Mississippi, while those of a steamer trading between Saint Louis and New Orleans, or between Vicksburg and Natchez, are credited to the Lower Mississippi. This plan has been adopted in order to avoid any duplication of freight movement, a duplication which would surely occur unless some such plan of allotment was made out and adhered to wherever possible, and of which more will be said when treating of the subject of freight movement by commodities.

In grouping the operations of the steamers constituting the fleet of the Mississippi valley it has been thought better to depart from the plan followed in the report of the vessels belonging to coast ports, and to segregate the returns according to the rivers over which their operations were conducted. The distribution of the steamers according to the rivers of operations is as follows:

STEAMERS, BY LOCALITY OF OPERATION.

Red River of the North	4	Chippewa	1
Saint Croix	15	Missouri, Osage, and Gasconade	52
Illinois	9	Allegheny	6
Ohio	380	Muskingum	7
Monongahela	48	Great Kanawha	21
Little Kanawha	5	Kentucky	5
Big Sandy	8	Wabash	3
Green	5	Tennessee	32
Cumberland	17	White	5
Lower Mississippi	265	Yazoo	11
Arkansas	15	Red	9
Washita	3		
Upper Mississippi	188	Total	1,114

The distribution of the steamers according to their districts of registration is as follows:

STEAMERS, BY LOCALITY OF REGISTRATION.

New Orleans	126	Memphis	71
Vicksburg	30	Paducah	53
Chattanooga	22	Saint Louis	115
Louisville	52	Saint Joseph	6
Kansas city	16	Burlington	43
Omaha	13	Minnesota (*a*)	46
Dubuque	28	Galena	27
Lacrosse	47	Cincinnati	115
Evansville	54	Pittsburg	152
Wheeling	94		
Natchez	4	Total	1,114

a Includes the ports of Saint Vincent (on the Red River of the North) and Saint Paul.

Having thus given in broad and general outline an indication of the plan of the present report, the next proceeding will be one of review, and will be taken in order to get back to the days of early transportation on the rivers of the Mississippi valley. The material for this review is abundantly found in the text of the Tenth Census report on steam navigation in the United States, and it is from this full presentation of facts that the following condensation has been made:

EARLY NAVIGATION.

Previous to 1778 the Ohio river was not navigated to any extent in the interests of commerce. Troops and war material of the French were moved from point to point on flatboats, and colonists moving to Kentucky would float down to their destination from Fort Pitt (now Pittsburg) on rafts or flats, as the case demanded. In the month of January, 1778, Captain Willing, acting as agent for the Continental army, took 2 large flatboats loaded with produce to New Orleans, where he exchanged it for arms, ammunition, and stores, and he reached Fort Pitt on his return voyage, bringing up his goods and some 50 men besides. From this time the traffic with the Lower Mississippi was kept up and Pittsburg was soon known as an important trading post. Immigration began then to pour into the Ohio valley, and the navigation of the river increased rapidly. Besides the great variety of small craft and rude arks, numerous well-built keel boats, barges, and some seagoing vessels were soon used in conveying the products of the rich region down the Mississippi, where it found a market and was exchanged for merchandise and West India products. It is stated that as late as 1817 the products of the Mississippi valley arrived at New Orleans in 1,500 barges and 500 flats, but no statistics of this commerce were kept at that early date.

In 1811 Fulton and Livingston began the construction of a steamboat at Pittsburg. She was called the Orleans, and was completed that year, making her first voyage down the river and arriving at New Orleans January 10, 1812. It was found a difficult matter to stem the strong current of the lower river, and this was not practically accomplished until about 1814. Within the next 10 years, however, there were built at Pittsburg 30 steamers, measuring 5,698.78 tons; and from 1815, the date of the first steamer at Louisville, up to 1825, 35 steamers, measuring 6,032.26 tons, were launched at that port and vicinity. The first steamer built at Louisville was called the Kentucky. She measured 112 tons, and, according to the record, came out in 1815. The next was the Governor Shelby, of 106.25 tons burden, built in 1817.

From 1817 to 1827 there were built at Cincinnati 52 steamers, measuring 9,306.61 tons. The Vesta, of 203.01 tons, came out in 1817, and was followed the next year by the Eagle, of 118.49 tons; the Heckla, of 124.25 tons; the

Henderson, of 123.17 tons, and the Cincinnati, of 157.38 tons. Besides these 4 steamers built at Cincinnati in 1818, there were 4 at Louisville, measuring 1,106.46 tons; 5 at Pittsburg, measuring 1,226.48 tons, and 1 at Wheeling, of 140.31 tons. In 1819 there were 12 steamers built at Louisville, measuring 2,375.93 tons; 6 at Cincinnati, measuring 1,551.01 tons; 2 at Pittsburg, measuring 501.71 tons; 1 at Wheeling, of 224.51 tons, and 2 at New Orleans, measuring 662.50 tons. The growth of steamer building on the western rivers was remarkably rapid and exceeded that on the Atlantic coast by a large amount in tonnage, for it is found that in 1820, according to these records, there had been built on the rivers 71 steamers, measuring 14,207.53 tons, as against 52 steamers on the Atlantic coast (exclusive of New England coast), measuring 10,564.43 tons. On July 27, 1820, a writer in a Louisville paper enumerated 73 steamers belonging to western navigation, and there were several on the stocks above the Falls of the Ohio and 2 at New Orleans. Estimating the freight actually carried by each boat at 150 tons, and an average of 3 trips annually, he placed the up-steamer freight at 33,300 tons, while the down freight exceeded this figure. The up freight by flatboats and arks would double this amount, so that 100,000 tons about represented the upward movement. Freights ranged from 1.5 to 2 cents per pound from New Orleans to Louisville, and the amount paid on this up freight by steamers was at that date $1,332,000, taking the last-named rate as the average. Down freights by steam were estimated at $666,000. The passenger traffic both ways, calculating 10 to a boat, at $100 up and $50 down, was placed at $333,000, so that the total income from passengers and freight on steamers was estimated at $2,331,000, to which was added $500,000 for lower river traffic. Some 3 years previous to this date it is stated there were only 30 steamers navigating the western waters. Great expectations were at this early date raised with regard to the commerce of New Orleans, since goods could be placed by it in any part of the Ohio valley for $2.50 to $3 per 100 pounds, while it cost nearly twice these sums to freight merchandise through from eastern seaboard cities. That New Orleans did not gain and hold the trade at that time was attributable to the superior capital and commercial character of the eastern merchants and to the dangerous nature of river navigation at that early date. New Orleans was never an extensive building point. In 1817 the Harriet, of 54.46 tons, was built there, and she was followed the next year by the Louisiana, of 102.54 tons. In 1819 New Orleans is credited with building 2 steamers, measuring 662.50 tons, and in 1820 with 6 steamers, measuring 1,034.12 tons; in 1821, 1 steamer, of 46.53 tons, and in 1822, 4 small boats, measuring only 296.67 tons. Pittsburg, Cincinnati, and Louisville were the leading building points.

From 1820 till the breaking out of the civil war, and up to 1865, when rail communication came into competition with the river interests, the progress of steam navigation on the lower river was rapid and extensive; in fact, the palmy days of steamboating on the Lower Mississippi were from 1840 to 1859, when the country had become populous and railroads had not yet come into active competition.

TRADE BEGINNINGS AT SAINT LOUIS.

Saint Louis was selected by Laclede in 1764 as a point possessing peculiar advantages for the fur trade from the confluence of the different rivers in its neighborhood. The statistics for 16 years previous to 1805 show that the average annual value of the furs collected at this place amounted to $303,750. The population at this date was estimated at 1,500, more than one-half of whom were absent a greater part of the year engaged in trapping. In 1810 the population was 1,600. In 1820 the census showed that the population had increased to 4,598; in 1830 to 5,852, and in 1840 to 16,469. The first steamboat, the Antelope, arrived here in 1817, on her way to explore the great Missouri. In 1845 a committee of 8 citizens prepared a report on the business of Saint Louis, from which it appears that during the year 1845 there were 2,050 steamboat arrivals in the harbor of Saint Louis, with an aggregate tonnage of 358,045 tons, and 346 keel and flat boats. Of these steamers 250 came up from New Orleans; 406 from different ports on the Ohio river, including arrivals from the Cumberland and Tennessee; 298 from ports on the Illinois river; 643 from ports on the Mississippi above the mouth of the Missouri, not including the daily trip of the Alton packet; 249 from ports on the Missouri river, and 204 from other ports, chiefly from Cairo and intermediate ports. At this date, 1845, the tonnage on the rivers, as reported at the different ports, was as follows:

	TONS.
Pittsburg	9, 233
Wheeling	1, 340
Pearl river	378
New Orleans	19, 321
Saint Louis	16, 664
Nashville	5, 666
Louisville	7, 114
Cincinnati	13, 137
Total	72, 853

ON THE UPPER MISSISSIPPI.

The first steamboat that ascended the Upper Mississippi as far as Fort Snelling, near the Falls of Saint Anthony, was the Virginia, a stern-wheel boat, which arrived at the fort in the early part of May, 1813. From 1823 to 1844 there were but few arrivals each year, sometimes not more than 2 or 3. The steamers running on the

Upper Mississippi at that time were used altogether to transport supplies for the Indian traders and the troops stationed at Fort Snelling. Previous to the arrival of the Virginia keel boats were used for this purpose, and 60 days' time from Saint Louis to the fort was considered a good trip. In 1844 the country had become settled enough to warrant the introduction of a regular line, and the Otter was put upon the route from Saint Louis to Saint Paul. The next year the Lynx and the Argo followed, and in 1847 came the Senator.

In 1851 3 boats went up the Minnesota river, and in 1852 1 ran regularly up that stream during the season. In 1853 the business required an average of 1 per day.

The following table shows the number of arrivals at Saint Paul from 1844 to 1856, including those from above and below, with date of opening and closing of the river:

YEARS.	Date of first arrival.	Number of arrivals.	River closed.
1844	April 6	41	November 23
1845	...do	48	November 26
1846	March 31	24	December 5
1847	April 7	47	November 29
1848	...do	63	December 4
1849	April 9	35	December 7
1850	...do	104	December 4
1851	April 4	119	November 28
1852	April 16	171	November 18
1853	April 11	300	November 30
1854	April 8	215	November 27
1855	April 18	560	November 20
1856	...do	846	November 10

In 1856 the arrivals at Saint Paul were as follows:

From Saint Louis	212
From Fulton city	28
From Galena and Duluth	228
From Dubuque	134
From Minnesota	216
From head of Lake Pepin	28
Total	846

About the same time a thriving trade sprang up between the southern counties of Minnesota and Galena and Dubuque. During a portion of the summer the War Eagle and Tishomingo ran regularly to Winona. Above, on the Upper Mississippi, the 3 steamers, Governor Ramsey, H. M. Rice, and North Star, ran between Saint Anthony and Sauk Rapids.

EARLY DAYS ON THE MISSOURI.

The first steamboat that navigated the Upper Missouri was built at Pittsburg by the American Fur Company in the spring of 1831, and was called the Yellowstone. She was a staunch boat, with side wheels, and had her cabin on the same deck with the boilers. Commanded by Captain Bennett, she made her first trip during the summer of 1831 to Fort Pierre, whence she returned to Saint Louis for the winter. During the summer of 1832 she made her second trip, reaching Fort Union, near the mouth of the Yellowstone river. The second boat was built by the American Fur Company and called the Assiniboine. She made her first trip in 1833, ascending to Fort Union, a few miles above the mouth of the Yellowstone river, whence she returned safely to Saint Louis. This boat made another trip in 1834, and in 1835 ascended as far as the mouth of Poplar creek, some 60 miles above the mouth of the Yellowstone. She was caught by the fast-falling water and was obliged to winter there. The following spring she took on a very valuable cargo of furs and started for Saint Louis. When she had reached Heart river, near where Fort Lincoln is situated, she was burned with her entire cargo.

For the 12 or 15 years following the American Fur Company did all of the steamboating that was done above Kanesville (now Council Bluffs), Iowa, making such improvements on their boats as experience suggested. Many efforts were made to ascend the Missouri river higher than Poplar creek, but it seems that none were successful. During the summer of 1850 the El Paso succeeded in reaching the mouth of Milk river, but during all this time Fort Union was really the head of navigation. The steamboats running farther up the Missouri than Kanesville were owned and operated by and for the American Fur Company only. Western Iowa began settling up at about this date, preparing the way for general commerce. In 1856 several boats besides those owned by the fur company ran up as far as the then new settlement of Sioux city, loaded with supplies suited to the wants of the country. This trade grew rapidly, until in the spring of 1857 boats ran from Saint Louis to Sioux city weekly. Above Sioux city there was little change, the fur company sending up each season from 2 to 4 boats as far as the mouth of the

Yellowstone river. In 1859 they built a small boat called the Chippewa. She was the first stern-wheel boat that navigated the Upper Missouri, and was better adapted to this river than any of her predecessors. She was accompanied by the Spread Eagle as far as Fort Union, and from thence pushed forward alone, passing Milk river, the highest point reached by the El Paso in 1850, and reached Fort McKenzie June 17, 1859. From this place, only a few miles below Fort Benton, she turned back. The Chippewa reached Fort Benton on her trip in 1860, being the first steamboat that ever reached the present head of navigation. About this time there was much interest exhibited in the Montana gold mines, which started an emigration in that direction. Boats were at once fitted out, loaded with provisions, tools, clothing, and such supplies as promised rich profits, and sent to Fort Benton. During the first years of the war the government established a number of posts on the Missouri above Fort Randall. This also increased the demand for boats, so that in 1864 there were at one time a dozen boats above Sioux city. In 1868 the first railroad reached Sioux city. Before the railroad had its warehouses built a company was formed which owned and operated the North Alabama, the Fannie Barker, the Deer Lodge, the Huntsville, the Tennessee, and other boats between Sioux city and Fort Benton. This line carried private, military, and Indian freight, and was quite successful. They operated in connection with the Sioux City and Pacific railroad. In 1870 they sold their shore property to the Peck line, operating on the river at that time. The Kountz line had also 4 boats on the river, and the Coulson line was organized about this time. The Fort Benton Transportation Company was organized in 1875.

PLAN OF THE TABLES.

Reverting to the present work, it will be found that the statistical results of the investigation by the Eleventh Census are embodied in 31 tables. The first 19 of these deal with the positive figures for 1889; the next 9 present the comparative figures for the 2 years of 1880 and 1889; 2 tables deal with the congressional appropriations made for the survey, improvement, and maintenance of the various water ways of the Mississippi valley, while the final table deals with the number of navigable miles on the rivers of the Mississippi valley. In addition to this division of the tables into 3 great groups, the positive statistics in the first 19 tables have been divided into 5 subgroups, entitled "Equipment", "Income and expenditure", "Employés", "Traffic", and "Classified details". Set down in index form the tables are as follows:

EQUIPMENT.
- Table 1. Equipment in general.
- Table 2. Equipment by classes.
- Table 3. Equipment by tonnage.

INCOME AND EXPENDITURE.
- Table 4. Expense account in general.
- Table 5. Expense account by classes.

EMPLOYÉS.
- Table 6. Employés by classes.

TRAFFIC.
- Table 7. Passenger and freight movement in general.
- Table 8. Freight movement by classes.
- Table 9. Commodities moved by freight steamers.
- Table 10. Commodities moved on barges.
- Table 11. Commodities moved by ferry steamers.
- Table 12. Recapitulation of commodities moved.

CLASSIFIED DETAILS.
- Table 13. Passenger and freight steamers.
- Table 14. Towboats.
- Table 15. Ferries.
- Table 16. Harbor craft.

CLASSIFIED DETAILS—Continued.
- Table 17. Miscellaneous.
- Table 18. No traffic report.
- Table 19. Résumé.

COMPARATIVE STATISTICS.
- Table 20. Fleets in 1880 and 1889.
- Table 21. Steamers by classes in 1880 and 1889.
- Table 22. Expense accounts in 1880 and 1889.
- Table 23. Wage details in 1880 and 1889.
- Table 24. Traffic in 1880 and 1889.
- Table 25. Documented fleets for 10 years, 1880 to 1889, inclusive.
- Table 26. Aggregate and average tonnages for same period.
- Table 27. Annual fluctuations of registered tonnage for same period.
- Table 28. Shipbuilding for same period.

CONGRESSIONAL APPROPRIATIONS.
- Table 29. Appropriations for rivers by detailed localities.
- Table 30. Appropriations by totals.

NAVIGABLE WATERS.
- Table 31. Navigable miles of the Mississippi fluvial system.

THE EQUIPMENT TABLES.

The first table of equipment (Table 1) shows the number, tonnage, and value of all steamers and unrigged craft of over 5 tons burden owned on the rivers of the Mississippi valley in 1889. This simply deals with the totals, the only divisions made being into steamers and unrigged; and the only distribution effected being that of the steamers and unrigged to each of the rivers upon which they plied, with totals for the Upper Mississippi system, the Ohio system, the Lower Mississippi system, the Red River of the North, and a grand total for the valley.

Table 2, entitled "Equipment by classes", divides up the entries of the previous table, separating the total number of steamers plying on each river into the 5 operating classes or occupations of passenger and freight, towing, ferry, harbor, and miscellaneous, and giving to each class its tonnage and value. The unrigged is also added to this list of classes, and a supplementary division is made of those steamers from which no traffic report was received. By this allotment the number, tonnage, and value of each class of craft operating on each river may be readily seen.

In Table 3 a new division is made of the steamers documented in the ports of the Mississippi valley in 1889. Instead of dividing them according to their respective occupations, as was done in Table 2, this table divides them according to groups of tonnage, and instead of allotting them to the different rivers on which they plied they are allotted to the various ports of entry. The material for this table was gathered from the report of the commissioner of navigation for 1889, and it is owing to this circumstance that the small discrepancy appears between the tonnage as made up from the census schedules and that gathered from the commissioner of navigation's report. In the case of the census schedules the tonnage of the 1,114 steamers amounted to 210,771.89 tons, while in the case of the commissioner's figures the 1,114 steamers had a tonnage of 209,826.07 tons, a difference of 945.82 tons, which is easily accounted for by the fact that gross tonnage is always a more or less elastic quantity and that it would be impossible to secure absolute identity of tonnage in the reports of two bureaus.

INCOME AND EXPENDITURE.

There are, it will be seen, 2 tables giving the statistics of income and expenditure. The first (Table 4) gives the total gross earnings, expenses, and net earnings of all the fleets operating on the rivers of the Mississippi valley and fluvial systems according to the same plan as was adopted in the general table of equipment (Table 1), while Table 5 divides up these gross earnings, expenses, and net earnings and distributes these totals among the various fleets divided into occupations according to the same plan pursued in the distribution of the fleets in the second table of equipment (Table 2).

One of the chief items making up the total of expenses incurred in the operation of the Mississippi valley fleet was that of wages, and this subject is treated of in Table 6. In this table there are shown the total wages paid during the year to all the officers and men making up the ordinary crews of each class of steamers, together with the total number of men required to work and officer the 975 operating steamers. Of course these figures are not to be understood as indicating the total number of men to whom whole or partial employment was given during the year. That number was necessarily a much larger one, but the difficulties experienced in securing anything like a correct report of this total number were found to be so great that the tabulation of the statistics regarding so nomadic a class of workers as many of the employés of the river steamboats are had to be abandoned. The average wages per man per year are not given in this table, but will be found in Table 23, which deals with the comparative wage statistics of the years 1880 and 1889.

THE TRAFFIC TABLES.

The presentation of the statistics of traffic is made in 6 tables, numbered in running order from 7 to 12, inclusive.

Table 7 shows in a general and comprehensive fashion the number of passengers carried and the tons of freight moved by all the operating craft of the Mississippi valley allotted to the different rivers and systems, the only attempt at detail being that of separating the passengers under the heads of "Regular and excursion" and "Ferry".

A corresponding division of the totals of freight moved will be found in Table 8, wherein the total amounts of freight moved on each river are set down under the respective heads of "Freight carried" and "Freight towed", whether by passenger and freight steamers, ferries, or towboats.

The 4 succeeding tables (9, 10, 11, and 12) carry out this work of division in a still greater degree. In Tables 9, 10, and 11 the freight carried by the passenger and freight steamers, by ferries, and on unrigged is given by commodities, the division of these being carried out to as great an extent as the returns of the schedules would permit. They give about 30 items of commodity, about equally divided between the products of agriculture, of mines, and of merchandise.

In Table 12 all these commodities are gathered under their respective heads and given in one table, thus showing the quantity of each commodity moved by all the operating craft of the Mississippi valley during 1889.

CLASSIFIED DETAILS.

The 6 succeeding tables (13, 14, 15, 16, 17, and 18) form another group, which may be entitled that of "classified details". In these tables the information which had been furnished in the various tables of equipment, income and expenditure, employés, and traffic is gathered together under the 6 titles of "Passenger and freight steamers", "Towboats", "Ferryboats", "Harbor boats", "Miscellaneous craft", and "No traffic report", with a separate table for each class of occupation.

In Table 19 all of the preceding returns are gathered together and a résumé is furnished, in which all the statistics of the various classes of vessels are grouped for each river of the valley. By this method the water transportation in any of its branches, on any river of the Mississippi valley, can be seen at a glance.

An apparent discrepancy exists between the total figures of the amount of freight towed as given in Table 10, which shows the towed freight by commodities, and that given in Table 14, which shows the entire operations of the towboats as a class. In the commodity table the total amount of freight moved on unrigged craft and on rafts on the rivers of the Mississippi valley is set down as 19,059,542 tons, while in Table 14, showing the amount of freight distinctively moved by towboats, the amount of freight moved is set down as 17,133,342 tons. The difference, 1,926,200 tons, is that amount of freight which was towed by passenger and freight steamers on the Illinois, the Allegheny, the Big Sandy, the Green, the Wabash, the White, the Arkansas, the Yazoo, the Washita, the Red, and the Red River of the North. In order to make this clearer, the amount of freight moved on these rivers by passenger and freight steamers has been doubly entered on Table 13 as the amount of freight carried and the amount of freight moved. A simple calculation would show that out of the total 11,159,798 tons of freight credited to the passenger and freight steamers as their share of the transportation business 9,233,598 tons were carried on the steamers themselves, and that the amount which has already been quoted, 1,926,200 tons, was towed. This method of calculation will also explain why, in the commodity table (Table 9), showing the amount of freight carried on the passenger and freight steamers, the total is set down as 9,233,598 tons, while in the class table (Table 13) of the passenger and freight steamers the amount of freight set down as being moved by these steamers is 11,159,798 tons; for just as the 1,926,200 tons of towed freight had to be subtracted from the class table (Table 13) so in this case the same amount of tonnage has to be added to the 9,233,598 tons set down in the commodity table (Table 9).

THE COMPARATIVE TABLES.

So far the tables which have been enumerated have referred only to the condition and operation of the water ways of the Mississippi valley for 1889, while in the 5 succeeding tables, numbered from 20 to 24, inclusive, there are given the comparative statistics for 1880 and 1889. The subjects compared are: Table 20, the number, tonnage, and value of the steamers and unrigged craft owned on the rivers of the Mississippi valley in 1880 and 1889, given by localities; Table 21, the number, tonnage, and value of all steam vessels owned on the rivers of the Mississippi valley in 1880 and 1889, given by their occupations; Table 22, the gross earnings and amount paid in wages by all craft operating on the Mississippi valley in 1880 and 1889; Table 23, the number of men constituting the totals of the ordinary crews employed on all the craft operating on the rivers of the Mississippi valley in 1880 and 1889, together with the wages paid and the calculated averages of annual pay, with a decrease or increase per man, given by localities; Table 24, the number of tons of freight moved and the number of passengers carried by all craft operating on the Mississippi valley in 1880 and 1889, given by localities.

An extension of certain of these comparative statistics is found in the next 4 sets of tables, numbered 25, 26, 27, and 28. The first of these presents the number and tonnage of all steam vessels and barges registered in the customs districts of the Mississippi valley for the years 1880 to 1889, inclusive. The second (Table 26) shows the number, aggregate tonnage, and average vessel tonnage of all the steamers registered in these districts during the same years. The third (Table 27) shows the average annual number of steamers and the average annual tonnage registered in the same districts during the same years, so arranged as to show the fluctuations of registration. The fourth (Table 28) presents the number and tonnage of all steam vessels and barges built in the customs districts of the Mississippi valley during these 10 years, together with data showing the number and tonnage of side-wheel steamers, stern-wheel steamers, and propellers built during each year in each district.

A recapitulation for the 10 years is given for the first and last of these sets of tables, from which those whose interest is not sufficient to lead them into the study of the details of the condition of shipbuilding, the changes in the method of propulsion, and the fluctuations of the operating fleets may see these things in 10 lines instead of 10 tables.

CONGRESSIONAL APPROPRIATIONS.

One of the most interesting tables is Table 29, which gives the amounts appropriated by Congress for the survey, improvement, and maintenance of the water ways of the Mississippi valley from the date of the earliest appropriation down to and including that of the act of Congress of September, 1890. These sums, so far as the grouping of periods is concerned, are given, first, up to and including 1879; second, from 1880 to 1889; third, the appropriations in 1890; and, fourth, the total appropriations from first to last. These sums, so far as the localities are concerned, are given with considerable detail, not only for the rivers and the systems into which all the tables are divided, but also for the different portions of the larger rivers for which appropriations have been made and for whatever tributaries and subtributaries have either been surveyed or improved by the government. An additional column is given, in which is entered the date of the earliest appropriation made for each division of a stream or its tributary. The whole forms a comprehensive index of the government's encouragement and care of the water ways of the Mississippi valley.

Table 30 gathers up the details of Table 29 and gives them in the compact form of totals only.

Table 31 deals with the number of navigable miles on the rivers of the Mississippi valley and the number of miles over which a transportation business was conducted in 1889.

WHAT THE TABLES SHOW.

Having considered the plan of the tables, it is next in order to consider what these tables show.

Taking up first the 3 equipment tables in their order, it is seen, from the totalized figures for the different divisions of the fluvial system of the Mississippi valley, given in Table 1, that in 1889 there were owned on those rivers 1,114 steamers, having a tonnage of 210,771.89 and a value of $10,539,251; 6,339 unrigged craft, with a tonnage of 3,182,608 and a value of $4,795,754; a grand total of 7,453 craft, having a tonnage of 3,393,379.89 and a value of $15,335,005. The figures of total tonnage appear enormous when placed in comparison with those of other sections of the country, but it will be observed that 93.79 per cent of the valley total is tonnage of low grade. Dividing this valley total into system totals, it is found that in 1889, on the Upper Mississippi and its tributaries, including the Red River of the North, there were 269 steamers, with a tonnage of 33,398.47 and a value of $1,895,269; 359 unrigged, with a tonnage of 191,555 and a value of $266,923; an aggregate of 628 craft, with a tonnage of 224,953.47 and a value of $2,162,192. On the Ohio river and its tributaries there were 537 steamers, of a tonnage of 107,195.83 and a value of $5,192,710; 5,708 unrigged craft, of a tonnage of 2,813,273 and a value of $3,503,631, making a total of 6,245 craft, of a tonnage of 2,920,468.83 and a value of $8,696,341. On the Lower Mississippi there were 308 steamers, with a tonnage of 70,177.59 and a value of $3,451,272; 272 unrigged craft, of a tonnage of 177,780 and a value of $1,025,200, making an aggregate of 580 craft, of a tonnage of 247,957.59 and a value of $4,476,472.

The preceding figures relate to all steamers and unrigged craft owned on the rivers of the Mississippi valley, whether in operation or not. Between these figures and the number of those vessels in operation there is a discrepancy, which is attributable to the fact that there were many steamers which were not in operation during 1889, or from which no traffic report could be secured. This unremunerative stock (unremunerative so far as the purposes of the present report are concerned) is given in Table 2 (and Table 18) under the class title of "no traffic report", and will be found to number 139 for the whole valley, with a tonnage of 17,387.07 and a value of $904,143. Of this number 33 steamers were owned on the Upper Mississippi system and Red River of the North, representing a tonnage of 4,435.17 and a value of $214,719; 59 belonged to the Ohio system, with a tonnage of 7,874.81 and a value of $401,802, and 47 were owned on the Lower Mississippi system, with a tonnage of 5,077.09 and a value of $287,622. This leaves an active balance of 975 steamers, with a tonnage of 193,384.82 and a value of $9,635,108, divided in their occupations, as will be seen in Table 2, and shown by class tables as follows:

EQUIPMENT OF CLASSES.

TABLE 13.—In the actual transportation of passengers and freight there were 320 steamers, with a tonnage of 95,215.26 and a value of $3,661,475, of which number 48 were employed on the Upper Mississippi and tributaries and Red River of the North, with a tonnage of 10,414.73 and a value of $443,700; 161 were employed on the Ohio, representing a tonnage of 45,513.50 and a value of $1,752,075, and 111 were employed on the Lower Mississippi system, with a tonnage of 39,287.03 and a value of $1,465,700.

TABLE 14.—In the towing of freight on all classes of unrigged craft and on rafts there were 290 steamers employed, with a tonnage of 53,875.55 and a value of $3,422,983, of which 98 were employed on the Upper Mississippi system, with a tonnage of 11,547.70 and a value of $759,000; 157 were employed on the Ohio system, with a tonnage of 32,662.67 and a value of $2,036,383, and 35 were employed on the Lower Mississippi system, with a tonnage of 9,665.18 and a value of $627,600.

TABLE 15.—Engaged in the ferry business were 163 steamers, having a tonnage of 18,593.40 and a value of $1,056,250, of which number 51 were employed on the Upper Mississippi system, with a tonnage of 3,905.31 and a value of $268,300; 61 were employed on the Ohio, with a tonnage of 11,543.53 and a value of $376,250, and 51 were employed on the Lower Mississippi system, with a tonnage of 3,144.56 and a value of $411,700.

TABLE 16.—In local or harbor towing and in such pursuits as would necessarily fall to floating channel property there were 141 steamers, with a tonnage of 18,981.96 and a value of $1,028,350. Of this number 29 belonged to the ports and harbors of the Upper Mississippi system, with a tonnage of 1,095.81 and a value of $69,750; 59 belonged to the ports and harbors of the Ohio system, with a tonnage of 5,482.35 and a value of $370,300, and 53 belonged to the ports and harbors of the Lower Mississippi system, with a tonnage of 12,403.80 and a value of $588,300.

TABLE 17.—The balance has been grouped under the head of "Miscellaneous", and includes pleasure boats, private excursion boats, traveling shows, and all such craft as can not be said to have any net earnings from the industry of water transportation, of which class there were 61 steamers in operation in the valley, having a tonnage of 6,718.65 and a value of $466,050. Of this number 10 were employed on the Upper Mississippi system, with a tonnage of 1,999.75 and a value of $139,800; 40 were employed on the Ohio system, having a tonnage of 4,118.97 and a value of $255,900, and 11 were employed on the Lower Mississippi, with a tonnage of 599.93 and a value of $70,350.

EQUIPMENT, BY DISTRICTS OF REGISTRATION.

The third table of equipment (Table 3) furnishes a decided amplification of the list of steamers distributed according to their districts of registration, which was given in the early part of this text. That list was made out irrespective of the order of importance of each district, but on taking up this idea it is found that, so far as the number of documented steamers go, the districts stand as follows in the order of their importance:

DISTRICTS OF REGISTRATION.	Rank in importance of registration, by number.	Number of registered steamers.	DISTRICTS OF REGISTRATION.	Rank in importance of registration, by number.	Number of registered steamers.
Pittsburg, Pennsylvania	1	152	Minnesota	10	46
New Orleans, Louisiana	2	126	Burlington, Iowa	11	43
Cincinnati, Ohio Saint Louis, Missouri	3	115	Vicksburg, Mississippi	12	30
			Dubuque, Iowa	13	28
Wheeling, West Virginia	4	94	Galena, Illinois	14	27
Memphis, Tennessee	5	71	Chattanooga, Tennessee	15	22
Evansville, Indiana	6	54	Kansas city, Missouri	16	16
Paducah, Kentucky	7	53	Omaha, Nebraska	17	13
Louisville, Kentucky	8	52	Saint Joseph, Missouri	18	6
Lacrosse, Wisconsin	9	47	Natchez, Mississippi	19	4

When, however, the relative importance of the districts as shown by registered tonnage is considered, the order, as will be seen by the following statement, is somewhat changed:

DISTRICTS OF REGISTRATION.	Rank in importance of registration, by tonnage.	Tonnage of registered steamers.	DISTRICTS OF REGISTRATION.	Rank in importance of registration, by tonnage.	Tonnage of registered steamers.
Saint Louis, Missouri	1	42, 827. 04	Minnesota	11	5, 213. 56
Pittsburg, Pennsylvania	2	32, 263. 23	Burlington, Iowa	12	5, 059. 39
Cincinnati, Ohio	3	31, 406. 87	Chattanooga, Tennessee	13	3, 966. 09
New Orleans, Louisiana	4	19, 248. 58	Lacrosse, Wisconsin	14	3, 884. 03
Memphis, Tennessee	5	12, 113. 76	Galena, Illinois	15	3, 129. 60
Louisville, Kentucky	6	11, 937. 92	Vicksburg, Mississippi	16	2, 875. 99
Wheeling, West Virginia	7	9, 768. 97	Kansas city, Missouri	17	1, 781. 35
Paducah, Kentucky	8	8, 781. 24	Omaha, Nebraska	18	1, 329. 55
Evansville, Indiana	9	6, 950. 76	Natchez, Mississippi	19	592. 35
Dubuque, Iowa	10	6, 355. 26	Saint Joseph, Missouri	20	340. 53.

STATUS OF THE DISTRICTS.

In the number of registered craft Pittsburg easily leads, while Saint Louis stands third, but in the amount of registered tonnage Saint Louis rises to first place, while Pittsburg takes the second. On the other hand, while Wheeling stands fourth in point of number it is seventh in point of registration, and Lacrosse, from being ninth in point of number, sinks to fourteenth in point of registered tonnage. In both number and tonnage, however, Saint Louis, Pittsburg, Cincinnati, New Orleans, Wheeling, Memphis, Evansville, Louisville, and Paducah stand easily as the first 9 districts, while the relative positions of the other districts do not vary very materially.

Looking from localities of registration to the analysis of tonnage (Table 3), it is interesting to note that while the small tonnage steamers, that is, from 5 to 50 tons, number 270, what may be called the medium tonnage steamers, that is, from 100 to 200 tons, are even greater in number, standing at 295. It is also interesting to note how close the number of the 300 to 400 ton steamers stands to the 500 to 1,000 ton class, being 74 to 71, while the number of the 400 to 500 ton class only reaches 28. The number (23) of the 1,000 to 2,500 ton class is rather surprising, but one can not fail to remark that the first 3 tonnage classes, the 5 to 50 tons, the 50 to 100 tons, and the 100 to 200 tons, are undoubtedly the favorite classes of river steamers, their aggregate number standing at 826 out of a total of 1,114, or 74.15 per cent of the whole number, and representing an aggregate tonnage of 69,879.60 out of a total tonnage of 209,826.07, or 33.30 per cent of the whole amount. Equally interesting deductions may be drawn from the returns of the different districts. These returns of equipment by tonnage classes were not kept in the previous census year, so that it is not possible to make any class comparisons, but the question of average tonnage will be considered when the group of comparative statistics is reached.

EARNINGS AND EXPENSES.

Tables 4 and 5 may be accepted as showing, both by localized totals and by classified details, how the business of water transportation on the rivers of the Mississippi valley paid in 1889. From Table 4 it will be gathered that the gross earnings of the entire operating fleet amounted to $16,337,533, the expenses to $12,600,342, and the net earnings to $3,737,191. From the figures given when making the summary of equipments in Table 1 it was found that the total value of the entire fleet of vessels of all classes in the Mississippi valley, whether in operation or not, amounted to $15,335,005. In all probability this estimated commercial valuation was short of the actual figures by some 30 per cent, which would raise the real value of the Mississippi valley fleet to $21,907,150. When localized it is found that of the total figures the operating fleet of the Upper Mississippi system and the Red River of the North took in as gross earnings $2,618,146, paid out $1,855,063, and secured net earnings of $763,083. The gross earnings of the operating fleet of the Ohio system were $6,702,013, their expenses $5,270,567, and their net earnings $1,431,446, while the gross earnings of the operating fleet of the Lower Mississippi system were $7,017,374, their expenses $5,474,712, and their net earnings $1,542,662.

EXPENSE ACCOUNTS OF CLASSES.

So far as the pecuniary results of the different classes go, it is found from Table 13 that the most important are the 320 passenger and freight steamers, which, in 1889, made as gross earnings $7,651,248, paid out $6,580,356, leaving net earnings amounting to $1,070,892. The bulk of these sums was earned and paid out on the Lower Mississippi, where the gross earnings amounted to $3,040,334, the expenses to $2,742,406, and the net earnings to $297,928. Next in importance comes the Ohio, where the gross earnings were $2,168,215, but as the expenses stand only at $1,850,248, leaving the net earnings $317,967, it will be seen that the passenger and freight steamers paid better on this stream than on the Lower Mississippi. The other streams stand as follows: the Upper Mississippi, the Tennessee, and the Red, all with gross earnings over $300,000; the Cumberland, the Yazoo, the Illinois, the Monongahela, the Missouri system, the Washita, and the White, having gross earnings over $100,000, and the Muskingum, the Great Kanawha, the Kentucky, the Wabash, the Green, the Red River of the North, and the Allegheny stand in the order given so far as their earnings are concerned.

Though the gross earnings of the towboats (Table 14) were considerably less than those of the passenger and freight steamers, standing as they do at $6,036,748 against $7,651,248, the cost of conducting this class of craft was considerably less. As the expenses stand at $4,098,723 for the towboats and $6,580,356 for the passenger and freight steamers, this means net earnings for the towboats of $1,938,025 against $1,070,892 for the passenger and freight steamers. It is very interesting to notice here that on the Ohio the earnings of both classes are almost identically the same, for while the gross earnings of the passenger and freight steamers on that river amounted to $2,168,215, the gross earnings of the towboats amounted to $2,168,020. It will be observed, however, that the expenses of running the towboats, though numbering 114 as against 85 passenger and freight steamers, stand only at $1,657,136 as against $1,850,248. The net earnings of the towboats therefore reached $510,884 as against $317,967 for the passenger and freight steamers. It is also interesting to notice the importance which towing has assumed on the rivers forming the Upper Mississippi system. The boats engaged exclusively in this business numbered 98, the gross earnings of that fleet reaching to $1,485,048, out of which were paid $956,143 expenses, leaving $528,905 net earnings. A close similarity between the number of vessels engaged as passenger and freight steamers and as towboats on the Ohio system and the strongly marked variations of tonnage and value are all interesting subjects for comparative data.

The expense account of the ferry fleet (Table 15) shows that the whole 163 steamers belonging to the Mississippi valley earned $1,196,817, out of which was paid $818,634, leaving $378,183 net earnings. These figures, however, are not as satisfactory as they might be, and it must be understood that they are only partial reports, the owners of the large ferry lines claiming that their complete returns were made when reporting on the railroads of which they form a transfer link.

The earnings of the harbor boats (Table 16) amounted to $1,291,080, the expenses to $940,989, leaving $350,091 for net earnings. These were chiefly employed at the ports of Saint Louis, Pittsburg, New Orleans, Cincinnati, and Memphis, the others being engaged at various points on the Saint Croix, Great Kanawha, and the Big Sandy. So far as the different systems are concerned the harbor boats of the Upper Mississippi made as gross earnings $115,249, incurred $80,675 expenses, leaving $34,574 net profits; those of the Ohio system ports made as gross earnings $374,352, paid out $286,095 expenses, and counted on $88,257 net earnings, and those of the Lower Mississippi ports made as gross earnings $801,479, paid out $574,219 for expenses, and profited to the extent of $227,260 net earnings.

The gross earnings of the miscellaneous class (Table 17), $161,640, have been balanced with a similar amount, because these earnings can not be said to have been made in the prosecution of the business of water transportation, and the balance has been struck in order that there might be no difference in the total net earnings of all the craft operating in the Mississippi valley.

CREWS AND WAGES.

One of the chief items accepted as indicating the importance of an industry is that of wages, and, in this particular, water transportation on the Mississippi valley, as is shown in Table 6, may certainly be regarded as an industry of much consequence. During 1889 the total of the ordinary crews of the operating craft numbered 15,996 men, although in the change of employés very many more men found whole or partial employment during the year. At the risk of repetition, it must be stated that this number must be taken as representing the total of the captains, engineers, deck hands, roustabouts, etc., who were required to man and run the 975 operating craft during the year, and to this complement of necessary men there was paid out $5,338,862. The largest number of these men were employed on the Ohio system, where to 7,663 men, making the complementary crews of 478 operating vessels, there was paid $2,545,625. The Lower Mississippi system stands next, where to 5,345 men, making up the complementary crews of 261 steamers, there was paid out $1,948,541; the number of men on the Upper Mississippi system standing at 2,943 as the complementary crews of 233 steamers, the amount paid in wages being $843,019. In the relation of craft and men (shown in Tables 13, 14, 15, 16, and 17) some peculiar facts make themselves apparent. On the 320 passenger and freight steamers the crew total amounted to 9,101 men, to whom was paid $2,603,031, or an average of $286.02 per man, while on the 290 towing steamers the crew total amounted only to 4,742 men, to whom was paid $1,787,995, or an average of $377.06 per man, which means that on the towboats the wages paid was on the average $91.04 per man higher than it was for the average passenger and freight steamer employé. The wages paid on the 163 ferryboats is reported at $456,676, paid to 893 men, while to the 1,016 men employed on the 141 harbor boats no less than $409,267 was paid. The reports for the 61 miscellaneous craft show that 244 men were employed, to whom was paid $81,893.

STATISTICS OF TRAFFIC.

Of the 5 operating classes only 3 can be said to be engaged in traffic, these being passenger and freight steamers, ferry steamers, and towboats. As is shown by Table 7, 29,405,046 tons of freight were moved by these 3 classes jointly on all the rivers of the Mississippi valley, of which amount 6,961,977 tons were moved on the Upper Mississippi system and Red River of the North, 16,041,866 tons on the Ohio, and 6,401,203 tons on the Lower Mississippi system.

The great bulk of this freight was towed, the total towed freight (see Table 8) amounting to 19,059,542 tons, of which 4,810,353 tons were towed on the Upper Mississippi system and Red River of the North, 12,235,201 tons on the Ohio system, and 2,013,988 tons on the Lower Mississippi system.

Nearly all of these 19,059,542 tons of towed freight were moved by the 290 towboats of which the equipment figures have been given. The exact figures of the amount of freight moved by the fleet of towboats are 17,133,342 tons, of which 4,762,024 tons were moved by those of the Upper Mississippi system, 11,149,972 tons by towboats of the Ohio system, and 1,221,346 tons by the Lower Mississippi system fleet of towboats.

The balance of the towed freight, 1,926,200 tons, was towed by the passenger and freight boats on the Illinois, Allegheny, Big Sandy, Green, Wabash, White, Arkansas, Yazoo, Washita, Red, and Red River of the North. By systems, the amounts of freight so towed were 44,692 tons on the Upper Mississippi system, 1,085,229 on the Ohio system, 792,642 on the Lower Mississippi system, and 3,637 on the Red River of the North.

The amount of freight carried on the 320 passenger and freight steamers amounted to 9,233,598 tons for the valley, of which 1,453,732 tons were carried on the Upper Mississippi system, 3,561,767 tons on the Ohio system, and 4,218,099 tons on the Lower Mississippi system. By actual carriage and towing these passenger and freight steamers moved 11,159,798 tons of freight on the rivers of the valley, of which amount 1,502,061 tons were moved on the Upper Mississippi system and Red River of the North, 4,646,996 tons on the Ohio system, and 5,010,741 tons on the Lower Mississippi system.

So far but 28,293,140 tons of freight out of a total movement of 29,405,046 tons have been accounted for. The remaining 1,111,906 tons are credited to the 163 ferryboats. As was explained when speaking of the expense accounts of these steamers, the report of freight carried is not as satisfactory as it might be, because of the claims made by their owners, either that the freight movement had already been given in the reports of railroads or else that their freight had been carried in such a shape (by wagon or car load) that no tonnage returns could possibly be made. Of the 1,111,906 tons given, 539,057 tons were reported for the Upper Mississippi, 800 for the Saint Croix, 158,035 for the Missouri, 244,898 for the Ohio, 168,016 for the Lower Mississippi, and 1,100 for the Arkansas.

It was on these 3 classes of steamers, the passenger and freight, ferry, and towboats, that the passenger traffic of the Mississippi valley was conducted (see Table 7). Most of the excursion passengers were either carried on the towboats or towed on barges by them, while the regular and ferry passengers were of course carried on the steamers devoted to the respective business. The total number of passengers carried during 1889 was, it will be seen, 10,858,894, made up of 2,384,248 regular and excursion passengers and 8,474,646 ferry passengers. By systems, it is found that there were 338,750 regular and excursion passengers carried on the Upper Mississippi and its tributaries and 1,482,984 ferry passengers, a total of 1,821,734. On the Ohio system the regular and excursion passengers amounted to 1,506,594 and the ferry passengers to 4,996,549, a total of 6,503,143; while on the Lower Mississippi system the regular and excursion passengers numbered 538,904 and the ferry passengers 1,995,113, a total of 2,534,017. No passenger movement was reported for the Red River of the North.

MOVEMENT OF COMMODITIES.

In the analysis of freight traffic shown by Tables 9, 10, 11, and 12 it is seen that while about 30 commodities are reported there are 6 principal commodities which easily lead, these being grain, cotton, coal, iron ore, lumber and forest products, and cotton seed and cotton-seed oil. The movement of these different commodities (see Table 12) was as follows: grain, 1,730,918 tons (wheat, 848,442 tons; corn, 786,888 tons; other grain, 95,588 tons); cotton, 896,292 tons; coal, 8,539,229 tons; iron ore, 574,790 tons; lumber and forest products, 9,300,641 tons; cotton seed and cotton-seed oil, 394,788 tons. Other items of which there was a large movement were: sugar, 190,873 tons; animal products, 177,376 tons; stone and gravel, 178,631 tons; clay and sand, 142,423 tons; hay, 91,579 tons, and iron manufactures, outside of iron (pig and bloom), 92,110 tons. Of flour-mill products there were moved 90,895 tons; of tobacco, 27,959 tons; of fruit and vegetables, 59,610 tons; of ice, 91,010 tons; of petroleum and other oils, 3,538 tons; of iron (pig and bloom), 7,775 tons; of cement, brick, and lime, 2,375 tons; of all other manufactures (including salt), 74,596 tons; of unclassified merchandise, 6,737,075 tons.

The great barge movement (Table 10) was of such commodities as corn, hay, coal, iron ore, stone and gravel, clay and sand, ice, lumber and forest products, cotton, and sugar. Out of a total movement of 91,579 tons of hay 57,635 tons were towed on barges; out of a total of 8,539,229 tons of coal 8,527,115 tons were towed; out of a total of 574,790 tons of iron ore 573,896 tons were towed; out of a total of 178,631 tons of stone and gravel 156,699 tons were towed; out of a total of 142,423 tons of clay and sand 141,464 tons were towed; out of a total of 91,010 tons of ice 91,000 tons were towed; out of a total of 9,300,641 tons of lumber and forest products 8,652,696 tons were towed; out of a total of 190,873 tons of sugar 100,000 tons were towed, and out of a total of 786,888 tons of corn 471,203 tons were towed. The principal towing of these commodities was conducted as follows: that of corn, on the Lower Mississippi, 471,203 tons; that of hay was principally, on the Missouri, 5,000 tons; the Tennessee, 5,000 tons; the Lower Mississippi, 5,000 tons, and the Arkansas, 42,000 tons. The principal towing of coal was done, on the Ohio, 4,018,787 tons; on the Monongahela, 3,059,418 tons; on the Great Kanawha, 941,446 tons; on the Lower Mississippi, 183,848 tons, and on the Arkansas, 165,888 tons. The principal barge movement of iron ore was on the Tennessee, on which 528,248 tons were towed out of a total of 573,896 tons. Stone and gravel were principally towed, on the Allegheny, 19,050 tons; on the Kentucky, 12,861 tons, and on the Arkansas, 120,000 tons. The principal barge movement of clay and sand was, on the Allegheny, 51,500 tons, and on the Cumberland, 89,964 tons. The principal ice movement on barges was on the Upper Mississippi, 45,050 tons, and on the Illinois, 41,950 tons. The principal barge movement of lumber and other forest products was 3,372,874 tons on the Upper Mississippi, 846,016 tons on the Saint Croix, 1,131,755 tons on the Ohio, 600,000 tons on the Green, 664,318 tons on the Cumberland, 310,654 tons on the Lower Mississippi, 261,906 tons on the Arkansas, and 325,477 tons on the Chippewa. The principal barge movement of sugar was 100,000 tons on the Lower Mississippi.

Of the commodities which were almost entirely carried on board passenger and freight steamers, the principal were wheat, other grains, mill products, cotton, iron (pig and bloom), cement, brick, and lime, all other manufactures, cotton seed and cotton-seed oil, and general merchandise. Those commodities which were carried entirely on passenger and freight steamers, or of which at least there was no barge movement, were tobacco, fruit and vegetables, animal products, petroleum and other oil, iron manufactures, and bar and sheet metal.

The ferry traffic could not be very well divided into commodities for reasons already referred to, and the bulk of the 1,111,906 tons had to be set down as general merchandise, the figures of that comprehensive commodity being 958,214 tons. Other commodities of which there was a ferry movement, and of which whole or partial returns were received, were: wheat, 8,461 tons; corn, 4,087 tons; other grain, 2,872 tons; mill products, 323 tons; cotton, 550 tons; tobacco, 252 tons; fruit and vegetables, 17,862 tons; coal, 11,801 tons; lumber, 100,400 tons; animal products, 6,858 tons; cement, brick, and lime, 182 tons, with a scattering tonnage of petroleum, sugar, bar and sheet metal, and all other manufactures.

CHARACTERISTICS OF TRAFFIC.

One of the principal values of these commodity tables will be to indicate the distinctive character of the local traffic on each of the rivers. It will be seen, for example, in Table 12 that the bulk of the Upper Mississippi's trade was in lumber and other forest products, the tonnage of that commodity standing at 3,473,189 tons out of a total tonnage movement on that river of 4,486,421 tons, the balance being almost entirely made up of 23,000 tons of wheat, 22,424 tons of coal, 45,050 tons of ice, and 913,888 tons of merchandise. The trade of the Saint Croix consisted almost entirely of a lumber movement, as did that of the Chippewa. The traffic on the Illinois, however, was a much more general one, 114,431 tons of general merchandise having been carried out of a total movement of 180,264 tons. The chief items of commodity movement on the Missouri, Osage, and Gasconade were: wheat, 141,658 tons; corn, 50,502 tons; mill products, 9,598 tons; coal, 51,162 tons; lumber, 104,384 tons; animal products, 11,424 tons, and general merchandise 743,769 tons. The traffic on the Ohio was a very general one, and included 125,003 tons of wheat, 2,585 tons of corn, 18,522 tons of cotton, 11,656 tons of iron ore, 57,881 tons of sugar, 54,297 tons of iron, and 55,163 tons of all other manufactures; but the principal commodities after all were those of coal, lumber, and general merchandise, the figures being, respectively, 4,018,788 tons, 1,131,777 tons, and 2,293,466 tons. The Allegheny traffic consisted almost entirely of stone and gravel, 19,050 tons; clay and sand, 51,500 tons, and lumber and other forest products, 276,860 tons. The Monongahela's chief commodity was of course coal, there being 3,059,418 tons of that commodity moved out of a total river movement of 3,294,932 tons. The Muskingum's traffic was one of general merchandise; that of the Little Kanawha was almost entirely of lumber and other forest products; that of the Great Kanawha was chiefly confined to coal, 941,446 tons; lumber, 80,468 tons, and general merchandise, 119,848 tons. The Big Sandy's trade consisted very largely of lumber, 142,950 tons, and merchandise, 139,889 tons, the Kentucky running in the same way. The list of the Green's commodities was a much more general one, although lumber was still the principal commodity. The Wabash included a large grain and lumber movement in its report, as did the Cumberland, with an additional item of 89,964 tons of clay and sand. The Tennessee's traffic covered almost the entire list of commodities, although the principal items were 528,248 tons of iron ore, 17,984 tons of corn, 12,542 tons of cotton, 18,657 tons of fruit and vegetables, 35,888 tons of coal, and 20,178 tons of stone. The Lower Mississippi carried but little manufactures, comparatively, except in the item of sugar, of which the tonnage was 130,828 tons; the other principal items were products of agriculture, including 422,800 tons of wheat, 498,746 tons of corn, and 784,008 tons of cotton, the other chief commodities being 183,848 tons of coal; cotton seed and cotton-seed oil, 271,809 tons; general merchandise, 1,704,745 tons, and 310,654 tons of lumber. The traffic of the White was mainly that of lumber, but that of the Arkansas embraced the products of agriculture, mines, and manufactures about equally distributed. The Yazoo's trade was largely made up of 3 items: 22,865 tons of corn, 27,861 tons of lumber, and 14,124 tons of cotton seed and cotton-seed oil. Very nearly the same distribution of freight is to be seen in the Yazoo, the Washita, and the Red.

RESTRICTION OF RETURNS.

As was said in an early paragraph of this text, the attempt has been made, wherever possible, to credit to each stream the commodity traffic which originated there or which was confined to points along that stream; that is, to the Illinois river, for instance, there was credited the 18,000 tons of wheat which were either moved from some point on that river to some other point on the Illinois, or which were moved from some point on the Illinois to some point on another stream. Of course, in attempting to thus confine the credit of freight operations in certain commodities to certain streams, the great difficulty has been to avoid a duplication of freight movement when considering the transportation of the same commodity on some other stream; that is, the difficulty has been to say that no part of these 18,000 tons of wheat is found in the report of wheat movement on any other river. It has, indeed, been almost impossible to confine this commodity movement within such strict limits, but the attempt has been made with reasonable success.

In such commodities as cotton, tobacco, iron ore, sugar and molasses, cotton seed, cotton-seed oil, and hay the work of limitation has not been so difficult, the movement of these commodities being a localized one, but in the movement of such commodities as coal and lumber and other forest products it has been a difficult matter to procure a correct limitation. Take, for example, the commodity of coal. Table 12 shows that in 1889 there were moved on the Ohio 4,018,788 tons of coal, on the Monongahela 3,059,418 tons, on the Great Kanawha 941,446 tons, the coal movement on the other tributaries of the Ohio making a total for the system of 8,102,544 tons of coal. Here the chief rivers of origin were the Monongahela and the Great Kanawha, while the great center of distribution was Pittsburg. The chief points of supply were Pittsburg, Wheeling, Cincinnati, Louisville, Saint Louis, Memphis, and New Orleans. In the supply of these different points the coal was towed out on barges from the Ohio into the Mississippi, and the difficulty has been to say decisively whether the coal taken over the Lower Mississippi, in the supply of the different cities along that stream, should be set down as part of the traffic of the Lower Mississippi or go only to the Ohio as the stream of origin. It has been found that of the 8,102,544 tons of coal which are set down to the credit of the Ohio and its tributaries 2,104,681 tons were brought out into the Lower Mississippi, while it has also been found that the coal movement which either had its origin on the Lower Mississippi or was confined to between points on that stream, exclusive of the stoppage of coal barges en route from the Ohio to points on the Lower Mississippi, amounted to 183,848 tons. The superior part of Table 12, it will be seen, sets down this amount as being the traffic in the commodity of coal, which alone should be properly credited to the Lower Mississippi, while in the subsidiary part of the same table it is shown that on the Lower Mississippi there was moved a total of 2,288,529 tons of coal, that amount being made up out of the coal brought down from the Ohio and the coal which was moved along the Lower Mississippi as the river of origin.

A similar treatment has been made with respect to the statistics of lumber. Here, it will be seen, the amount of lumber carried over the Lower Mississippi, irrespective of origin, was 1,794,719, while the traffic in lumber on the Lower Mississippi as a river of origin was but 310,654 tons.

ORIGIN OF FREIGHT.

The two sets of figures, therefore, show that on the Lower Mississippi system there was a total movement of coal, irrespective of origin, of 2,465,480 tons, but that on the Lower Mississippi system, as a system of origin, there was a movement of but 360,799 tons, while the total lumber movement on the Lower Mississippi system, irrespective of origin, was 2,222,813 tons, but that the lumber movement on the Lower Mississippi and its tributaries as points of origin was only 738,748 tons.

In the matter of coal it will be seen the total movement on the Upper Mississippi system was 75,886 tons, that on the Ohio system was 8,102,544 tons, and that of the Lower Mississippi and its tributaries was 2,465,480 tons, which, added together, would give a grand total as the freight movement in coal of the vessels on those 3 systems of 10,643,910 tons. But in making up a computation of the total movement of the commodity of coal on these 3 systems it should be understood that it is only proper to take the 75,886 tons on the Upper Mississippi and its tributaries, the 8,102,544 tons on the Ohio and its tributaries, and the 360,799 tons on the Lower Mississippi and its tributaries, with the total of 8,539,229 tons as the true total of the report of the commodity movement of coal on the rivers of the Mississippi valley. In the same way the 3 totals of 4,749,808 tons, 3,812,035 tons, and 2,222,813 tons of lumber and other forest products can be considered as the total freight movement in lumber by all the vessels of the Mississippi valley, but the actual amount of lumber moved on the rivers of the Mississippi valley was only 9,300,641 tons, made up of the 4,749,808 tons moved on the Upper Mississippi and its tributaries as rivers of origin, the 3,812,035 tons moved on the Ohio and its tributaries as rivers of origin, 738,748 tons moved on the Lower Mississippi and its tributaries as rivers of origin, and the 50 tons moved on the Red River of the North as river of origin.

COAL MOVEMENT ON THE OHIO.

From the preceding analysis it will be observed that by far the most important item of freight of the Ohio is coal, and on this account it was thought advisable in preparing a bulletin (No. 88) on transportation on this river to attempt to localize the coal traffic. The subjoined table was therefore worked out, showing the amount of coal shipped from Pittsburg (Pennsylvania), Point Pleasant (West Virginia), Pomeroy (Ohio), Ashland (Kentucky), and Bellaire (Ohio), and the cities to which this coal was shipped:

COAL TRAFFIC ON THE OHIO.

A.—AMOUNT OF COAL SHIPPED FROM PLACES NAMED AND THE DISTANCE CARRIED EXPRESSED IN TON MILEAGE.

FROM—	Tons.	Tons moved 1 mile.
Total	4, 018, 788	2, 644, 392, 853
Pittsburg, Pennsylvania	2, 753, 599	2, 382, 822, 128
Point Pleasant, West Virginia	1, 067, 857	231, 087, 122
Pomeroy, Ohio	136, 900	23, 780, 489
Ashland, Kentucky	42, 530	6, 013, 350
Bellaire, Ohio	17, 902	689, 764

B.—AMOUNT OF COAL SHIPPED FROM PITTSBURG TO PLACES NAMED.

TO—	Tons.	Miles.	Tons moved 1 mile.	TO—	Tons.	Miles.	Tons moved 1 mile.
Total	2, 753, 599	....	2, 382, 822, 128	Greenville, Mississippi	10, 000	1, 465	14, 650, 000
Cincinnati, Ohio	1, 287, 394	467	601, 212, 998	Natchez, Mississippi	46, 231	1, 708	78, 962, 518
Cairo, Illinois	20, 000	967	19, 340, 000	New Orleans, Louisiana	401, 805	1, 980	973, 773, 900
Saint Louis, Missouri	100, 000	1, 167	116, 700, 000	Louisville, Kentucky	596, 249	598	356, 556, 902
Memphis, Tennessee	126, 160	1, 205	152, 022, 800	Baton Rouge, Louisiana	9, 460	1, 848	17, 482, 080
Helena, Arkansas	10, 000	1, 284	12, 840, 000	Madison, Indiana	44, 000	570	25, 080, 000
White river, Arkansas	10, 000	1, 378	13, 780, 000	Parkersburg, West Virginia	2, 300	183	420, 900

C.—AMOUNT OF COAL SHIPPED FROM POINT PLEASANT TO PLACES NAMED.

TO—	Tons.	Miles.	Tons moved 1 mile.	TO—	Tons.	Miles.	Tons moved 1 mile.
Total	1, 067, 857	....	231, 087, 122	Greenville, Mississippi	652	1, 201	783, 052
Cincinnati, Ohio	1, 010, 181	203	205, 066, 743	Memphis, Tennessee	539	941	507, 199
Louisville, Kentucky	46, 315	334	15, 469, 210	Frankfort, Kentucky	506	338	171, 028
New Orleans, Louisiana	481	1, 716	825, 396	Orange, Kentucky	1, 567	373	584, 491
Baton Rouge, Louisiana	1, 176	1, 584	1, 862, 784	Lawrenceburg, Kentucky	476	226	107, 576
Donaldsonville, Louisiana	183	1, 640	300, 120	Vanceburg, Kentucky	109	111	12, 099
Bayou Sara, Louisiana	1, 602	1, 549	2, 481, 498	Portsmouth, Ohio	1, 639	90	147, 510
Vicksburg, Mississippi	2, 023	1, 336	2, 702, 728	Augusta, Kentucky	408	161	65, 688

COAL TRAFFIC ON THE OHIO—Continued.

D.—AMOUNT OF COAL SHIPPED FROM POMEROY TO PLACES NAMED.

TO—	Tons.	Miles.	Tons moved 1 mile.
Total	136, 900	....	23, 780, 489
Cincinnati, Ohio	30, 324	218	6, 610, 632
Louisville, Kentucky	8, 424	349	2, 939, 976
Portsmouth, Ohio	25, 994	105	2, 729, 370
Huntington, West Virginia	2, 684	60	161, 040
Frankfort, Kentucky	1, 691	353	596, 923
Maysville, Kentucky	49, 383	156	7, 703, 748
Vanceburg, Kentucky	2, 400	126	302, 400
Ripley, Ohio	8, 800	165	1, 452, 000
Richmond, Ohio	3, 200	197	630, 400
Manchester, Ohio	2, 000	145	290, 000
Chilo, Ohio	2, 000	182	364, 000

E.—AMOUNT OF COAL SHIPPED FROM ASHLAND TO PLACES NAMED.

TO—	Tons.	Miles.	Tons moved 1 mile.
Total	42, 530	....	6, 013, 350
Cincinnati, Ohio	40, 850	147	6, 004, 950
Ironton, Ohio	1, 680	5	8, 400

The 7 tables of classified details (Tables 13 to 19, inclusive) may safely be considered as self-explanatory, and as really being prepared and presented more as a matter of comprehensive convenience than as furnishing any new lesson.

STATISTICS OF 1880 AND 1889.

In considering the comparative statistics embraced in Tables 20 to 28, inclusive, some peculiar conditions are encountered. As will be seen by the comparative table of equipment (Table 20), there were registered in the ports of the Mississippi valley in 1880 1,198 steamers, which had a tonnage of 251,792.85 and a value of $12,009,400, while in 1889 the registered steamers numbered 1,114, with a tonnage of 210,771.89 and a value of $10,539,251, a decrease of 84 steamers, of 41,020.96 tonnage tons, and of $1,470,149 in value. On the other hand, it will be found that while in 1880 the unrigged craft of the Mississippi valley numbered 3,854, with a tonnage of 909,824.01, the unrigged in 1889 had risen to 6,339 in number, with a tonnage of 3,182,608, an increased number of 2,485, with an increased tonnage of 2,272,783.99. Notwithstanding this increase of tonnage and number, the valuation of the unrigged remains almost stationary. So far as the valuations are concerned, however, they may be considered as a varying quantity. The schedule calls for "estimated commercial value", and the figures set down will run high or low according to the basis upon which the estimator places his value. In some cases a man estimates his vessels at what they cost, while in other cases he estimates them only at what he supposes they would realize in sale, while the insurance agent may have a third estimate; then, too, the depreciation in value has to be considered as a factor in these estimates, although in this case there is no depreciation sufficient to balance the positive increase of craft. A reasonable explanation of difference of estimate arises in the fact that the values given for 1880 are those which were made by local or general experts, while those for 1889 were returned by the owners themselves, and that these owners from first to last manifested a very conservative spirit in rating the value of their property. The same difference in values will be found in the total of all craft owned on the Mississippi valley, for while the total number for 1880 stands at 5,052 and that for 1889 at 7,453, an increase of 2,401, and the total tonnage for 1889 shows an increase of 2,231,763.03 tons, still the valuation remains almost stationary. It is repeated that it is a safe estimate that there is an undervaluation of at least 30 per cent on all these vessels reported for 1889, and calculating on this basis there is an omitted value of $6,572,145 for 1889, which, added to the estimated commercial value as reported, will give the total valuation for all the craft of the Mississippi in 1889 of $21,907,150, figures which are somewhat nearer the mark.

NEW METHODS OF TRANSPORTATION.

The decrease in the number of the Mississippi valley steamers must not be taken as an indication of a waning industry. The explanation lies in the new method of transportation as indicated in the increased number and value of unrigged. The exceedingly large barge tonnage on the Ohio has already been referred to, and in addition to this it may be said that at Pittsburg itself there are owned no fewer than 3,581 barges, having a tonnage of 1,982,407 and a value of $2,145,765, or an average of nearly $600. Some of the barges rise in value, however, to $2,000, while there are others, employed by the wood sellers on the small streams, for which $50 would be a generous estimate. Wood, of course, is the material most generally used, but iron is also freely employed, and steel appears to be coming into favor as a material of construction.

The main employment of the great Pittsburg fleet of barges is in the transportation of coal, and concerning this industry the text of the Tenth Census report on steam navigation of the United States contained the following interesting description:

COAL BARGES OF THE OHIO.

> This coal is mined along the banks of the Monongahela river, which has been improved by a series of dams and locks, dividing it up into what are called pools or pockets. Here the small tows, consisting of 3 or 4 loaded barges, are made up and taken out through the locks to Pittsburg, where they are combined in still larger tows for transportation to Louisville. Here they are again combined into immense tows of 30 or more barges and boats for the final trip down the Mississippi. The steamer is put behind these barges and all are bound together in one firm mass by means of ropes and chains tightened by ratchets, and the steamer used as a rudder to guide the field of barges around the bends in the river, great skill being required in the strong currents in performing this task, called "flanking". * * * Coal boats contain about 24,000 bushels or 900 tons, and cost from $700 to $800 when new. A tow from Pittsburg to Louisville consists of from 12 to 16 barges, or 8 to 10 coal boats, and from Louisville to points below, from 16 to 20 boats and barges. One of the largest tows that was ever taken down from Louisville contained 38 pieces, measuring 862 feet in length, 260 feet in width, and contained 679,854 bushels, and beside this the steamer carried 19,500 bushels, making a grand total of 699,354 bushels, or 25,902 tons. It is claimed that in this traffic is found the cheapest freight rate in the country, as coal has been put into New Orleans, 2,000 miles from Pittsburg, at 60 cents per ton.

This change in method was indicated in the text of the Tenth Census. In speaking of the river interests of the Mississippi in that chapter of Volume IV entitled "Steam navigation in the United States", it says:

> The growth of this model barge system on the western rivers has been steady for the past 4 years, and it is now assuming an importance in the commerce of the west worthy of attention. Of the better class of barges * * * there were on the Mississippi and Ohio 286 reported to this office, measuring 158,771.50 tons actual capacity. * * * In the movement of bulk grain and heavy freights this system is gradually supplanting the ordinary steamer, and it has many advantages. By economy of time and steady movement the barge tug would equal the steamer in speed, making the run from Saint Louis to New Orleans with 5 to 7 barges in about 5 days, at a cash expense of $1,000. The round trip will not exceed 16 or 17 days. The capacity of the barges varies from 18,000 to 100,000 bushels, the medium being about 35,000 bushels, so that an average tow consists of 7 barges containing 232,834 bushels, or about 7,000 tons.

INCREASE OF TOWED FREIGHT.

This relation of cause and effect is seen to be consistently carried out in the fifth comparative table (Table 24), showing the comparative freight movement in 1880 and 1889. On the steamers, in the first-mentioned year, there were transported 13,557,884 tons of freight, while in 1889 the actual transportation of freight by steamer was but 10,345,504 tons, a decrease of 3,212,380 tons. But while the business of the freight steamer has decreased, it will be seen that the towed freight has very materially gone up, the figures for 1880 being 5,388,638 tons, while in 1889 they had risen to 19,059,542 tons, an increase of 13,670,904 tons of towed freight. The decreased steamer-carried freight will of course diminish this gain, but even when the 3,212,380 tons decrease in steamer freight is taken from the 13,670,904 tons of towed freight there remains a net increase of 10,458,524 tons of freight moved on the rivers of the Mississippi valley in 1889 over the total of 1880, although it is but proper to state here that this increase would probably suffer a diminution if the barge movement for 1880 had been as fully reported as it has been for 1889. On the other hand, it must be understood that 1889 was what is known as a poor year, nearly all of the rivers having suffered from low water. The passenger business has kept up much more steadily than it had been imagined would be the case, and it will be seen that in both the "ferry" and "regular" divisions of the passenger returns the ratio of increased travel has run very steadily with that of population.

COMPARED EARNINGS.

Turning back to the comparative expense account shown in Table 22, it will be seen that only the gross earnings are compared, this limitation being necessary because in the returns for 1880 only that portion of the account was asked for. There is an apparent contradiction here, for while the traffic has increased, as has been shown, the amount of gross earnings has diminished. In 1880 the gross earnings of the Mississippi valley fleet were $20,293,173, while in 1889 they were reported at but $16,337,533, a difference of $3,855,640. Much of this difference can be ascribed to the same set of causes which operate in the returns of valuation, while much more can be ascribed to the diminished earnings of water transportation due to increased competition of railroads. A poor paying business especially affected the Upper Mississippi and the Missouri, as will be seen by the comparative returns for these two parts of the valley system. The business was done for whatever could be had, and in many cases the shipper fixed his own rates. Then, too, the diminution of earnings on the Upper Mississippi and Missouri is attributable to the fact that these are branches of the system where the old methods of transportation still largely obtain, while on the Lower Mississippi, where the new methods of transportation have so rapidly come into vogue, the increase of gross earnings is equally noticeable. On the Ohio the decrease can only be ascribed to the effect of ardent competition. It must be remembered, however, that these are gross earnings, and that in the absence of the expense account they offer no indication whatever of profits. The bulk of the business on the Mississippi and its branches is rapidly passing into the hands of large concerns, which are enabled to control their expenses in such a way as to considerably diminish their gross earnings and yet maintain their net profit.

In Table 23 there are two interesting columns which show the total crews and the amount paid in wages during 1880 and 1889. By the term "total crews", it is repeated, there must be understood the total number of men making up the totals of the ordinary crews required on board each craft, and not the total number of men employed during the year. Here it will be seen that the total number of men has fallen from 23,616 to 15,996, a diminution of 7,620 men, while the wages paid have only dropped from $6,979,226 to $5,338,862, a decrease of $1,640,364, two decrements which do not preserve their ratio. On looking for an explanation of this, it is found set down in the last 3 columns, which show that the rate of wages per man per annum has increased in every part of the system with the exception of the Missouri, and that the whole annual rate of wages has increased $38.23 per man. The increase, it will be observed, is largest on the Lower Mississippi, and next stands the Ohio, two branches of the valley system where transportation by barges is most practiced. Though the total number of crews has decreased in consequence of the diminution of freight steamers, the smaller number of men who are employed on the barges are men in the receipt of a much higher rate of wages than those whose services have been dispensed with.

FLUCTUATIONS OF FLEETS.

The fluctuations in the documented fleets of the Mississippi valley rivers for the 10 years 1880 to 1889, inclusive, are clearly shown in the 3 tables, 25, 26, and 27, which were carefully prepared from information furnished by the courtesy of the commissioner of navigation and the bureau of statistics.

Two things will be noted from a glance at Table 25: first, that the number of steamers which the commissioner reports as having been documented in 1880 is not the same number as is given by the census for that year as the fleet of the valley, and, second, the very decided drop from the barge fleet of 1880 to that of 1881.

With respect to the first difference it may be stated that the 1,225 steamers which the commissioner reports as the documented fleet of the Mississippi valley also include those steamers which traded from New Orleans seaward, while the 1,198 steamers which the census states formed the fleet for that year do not include those steamers. No division of this sort was made in the commissioner's report until the year 1883, when the New Orleans river fleet was segregated, the number for the port in that year standing at 132 as against 172 for the previous year, and the actual river fleet for the whole valley being set at 1,163 as against 1,226 for 1882.

The very remarkable drop in the barge fleet from 1,070 in 1880 to 233 in 1881 is due to the fact that it was about this time that the law went into effect by which the registration of barges was only compulsory in those cases wherein these craft were employed in the carriage of bonded goods. It may be added here that the still greater difference between the number of barges (1,070) reported on by the commissioner for 1880, and the number (3,854) reported on by the census for the same year is due to the other fact that for this year, as for every other year, the commissioner only reports upon registered barges, while the census reports on every unrigged craft owned and operated. The same explanation can be applied to the number of barges (132) given by the commissioner as the barge fleet in Table 25 for the year 1889, and the number (6,339) given in Tables 1 and 20 as the census barge fleet for the same year.

INDIVIDUAL CASES.

In looking at the number of steamers registered in the customs districts (Table 26), it is found that in this particular Cincinnati has almost stood still, its registration for 1880 being 116, and for 1889 115, its lowest point being in 1884, when its registered fleet was 101, and its highest number being the 116 which made its entry for both 1880 and 1888.

In point of number Saint Louis has very perceptibly and steadily decreased, the series running 162, 153, 163, 160, 136, 141, 129, 132, 123, 115.

Wheeling shows a similar decrease, its series being 142, 137, 144, 110, 109, 112, 101, 109, 109, 94.

Pittsburg, however, shows a far less depreciation, its series of registered fleets being 168, 160, 169, 157, 163, 155, 154, 158, 155, 152.

On the other hand, the customhouse books at Memphis have shown an increase in number, the 1880 fleet numbering 66 and the 1889 fleet numbering 71, the lowest point being 65 in 1881, and the highest being 82 in 1887.

Dubuque has remained almost stationary. In 1880 it had 29 registered steamers and in 1889 it had 28, the average annual registered fleet numbering 25.70.

Vicksburg, with the exception of a temporary obscuration in 1881 and 1882, has maintained a singularly unvarying fleet, the figures for 1883 onward being 28, 30, 32, 30, 30, 30, 30, this being the steadiest record of all the ports, with the exception, perhaps, of Natchez and the district of Minnesota, the first-mentioned district running 3, 5, 4, 4, 3, 3, 3, 4, 4, and the second 48, 45, 48, 46, 48, 44, 46, 49, 47, 46.

Louisville's variation has been but little, too, so far as the number of registered craft is concerned, the fleet of 1889 being 52 against a 53 fleet for 1880.

Burlington took a sudden advance in 1881, showing 42 registered steamers against 31 for the preceding year, but from 1881 onward the registrations have changed very little, the series being 42, 43, 45, 46, 45, 45, 43, 42, 43.

Lacrosse has a record of tolerably steady increase, its fleet running at 39, 44, 45, 35, 43, 40, 41, 45, 45, 47.

Galena also comes very close to maintaining the same standard, the series being 25, 23, 23, 25, 23, 24, 23, 26, 26, 27, a deflection of 2.50 from an average of 24.50.

Evansville shows more fluctuations, and Omaha still more, while New Orleans, from and inclusive of 1883, has experienced but few variations, the series being 132, 138, 127, 125, 129, 127, 126.

Nashville does not appear, it will be observed, after 1887, its registrations being now merged in those of Paducah, which port began registering in 1884. The latter's increase since that time has been the most remarkable of any on the list, the series being 9, 18, 23, 29, 42, 53.

Cairo ceased to be a port of entry in 1885, the 18 steamers it then had being distributed among other ports.

Chattanooga only came into record as a port of entry in 1882, the number of registered steamers that year standing at 13, and for the 7 succeeding years at 17, 16, 18, 15, 17, 20, 22.

Kansas city and Saint Joseph are also comparatively new ports of entry, the first beginning to record in 1883, the series since that time being 11, 11, 13, 13, 13, 16, and the second beginning to record in 1885, with a continued series of 3, 4, 6, 6, 6.

CHANGES IN REGISTERED TONNAGE.

Passing next to a consideration of the registered tonnage in the customs districts, it is found that New Orleans has experienced a moderate decrease, the figures running down from 21,199 tons in 1883 to 19,249 tons in 1889.

Natchez, on the other hand, has made a considerable advance, for though its registered tonnage was never large it has increased from 192 tons in the first year of the decade to 592 tons in the last year. Its average annual registration of tonnage was 359.11, the 2 years mentioned showing the highest point above and lowest point below the average, with 1885 as the year when the registered tonnage, 303 tons, was closest to the average.

Vicksburg shows an average annual registration of 2,735 tons, the year of greatest registration being 1885, with 3,638 tons, the year of lowest registration (omitting 1882) being 1886, with 2,556 tons, and the year 1887 coming closest to the average, with 2,723 tons.

Memphis has had many fluctuations of registration, that of the year 1889, being the year of average registration, with 12,114 tons; 1884, with 14,977 tons, marking the highest limit, and 1882, with 10,426 tons, marking the lowest limit.

As has been already stated, Nashville ceased to be a port of registration after 1887, its registered tonnage in that year being about the same as it was in 1880, the exact figures being 3,469 tons and 3,621 tons.

Chattanooga, on the other hand, and as has also been stated, only came into existence as a port of registration in 1882, the customhouse entries from that time onward being a continually increasing one and rising from 1,567 tons to 3,966 tons in 1889.

Louisville has experienced a marked declination, the registered tonnage in 1880 being 17,750 tons, and that in 1889 being 11,938 tons. The year 1884 was the year of highest registration of this port, the returns showing entries amounting to 18,175 tons.

The record of Paducah has been a very remarkable one. The first registrations of tonnage were made in 1884, when they amounted to 652 tons, while in 1889 they had risen to 8,781 tons.

Saint Louis's decline in registered tonnage has been even more marked than that of Louisville, for while in 1880 it was 59,699 tons, in 1889 it was but 42,827 tons. Its best year was 1883, when the registered tonnage amounted to 62,350 tons.

The record of Kansas city is almost as remarkable as that of Paducah, the first registrations being in 1883 and amounting to 113 tons, those of 1889 standing at 1,781 tons.

DISTRICT RECORDS.

The port of Saint Joseph, which only began an existence as a port of registration in 1885 with 297 tons, showed entries amounting to 747 tons in 1887, that number decreasing to 341 tons in 1889.

One of the ports of steadiest record has been that of Burlington, its tonnage list in 1880 being 2,414 tons and that of 1889 being 5,059 tons, the average registration being 4,510.40 tons.

Dubuque has an almost corresponding record, the registered tonnage for 1880 being 3,697 tons and that of 1889 being 6,355 tons, with an average registered tonnage of 4,455.30.

Lacrosse has experienced a very notable decline in importance as a port of registration. The records for 1880, 1881, and 1882 give over 6,000 tons for each year. Then came a drop to 3,028 tons in 1883, since which time, however, the entries have crept up little by little, until in 1889 they amounted to 3,884 tons.

The district of Minnesota has about stood still, the registrations in 1880 amounting to 5,873 tons, and those in 1889 amounting to 5,214 tons, the average annual registration being 6,146.80 tons.

The port of Galena has shown a slow but healthy increase, the tonnage registered in 1880 being 2,267 tons, and that in 1889 being 3,130 tons, the average annual registration being 2,634.60 tons.

Cairo ceased to be a port of registration in 1885, at which time the customhouse books showed a registration of 3,508 tons.

Though the registered tonnage of Evansville was greater in 1889 than it was in 1880, the figures being 6,951 tons against 5,709, each year was below the annual average registration of 7,123.30 tons, the years of largest entries being 1884, 1885, 1886, and 1888, when it was over 8,000 tons for each year.

Cincinnati has experienced the same decrease in registered tonnage that has marked so many of the other great ports of the Mississippi valley, the tonnage registered in 1880 being 39,931 tons and that in 1889 being 31,407, with an annual average registration of 34,170.50.

Wheeling, Pittsburg, and Omaha all show an equally perceptible diminution, the 1880 figures for these 3 ports being, respectively, 16,712 tons, 39,483 tons, and 5,887 tons, while the 1889 figures of the same ports are 9,769 tons, 32,263 tons, and 1,330 tons.

The records for all the ports of the Mississippi valley, in fact, show a steady diminution of registered steamer tonnage from 256,915.99 tons in 1880 to 209,826.07 tons in 1889, a loss of 47,089.92 tons. This decrease, however, it should be repeated, must not be taken as indicating a decaying industry, but only as an evidence of that gradual change in conducting transportation on the rivers of the Mississippi valley to which reference has already been made once or twice in the body of this text—the fact that the large-tonnaged freight-carrying steamers are each year dropping into disuse, their places being taken by small-tonnaged but powerful towing boats, which are employed in the movement of unregistered barges. A computation from the entries made on Table 26 of the number, tonnage, and average vessel tonnage for each port for each of the 10 years under consideration will furnish an additional evidence of this, for while the average vessel tonnage of all the craft in 1881 was 207, and 208 in 1884, it had dropped to 191 in 1887 and to 188 in 1889.

A RECORD OF SHIPBUILDING.

Still another evidence of the same altered condition of affairs is found in Table 28, which shows the number and tonnage of all steam vessels and barges built in the customs districts of the Mississippi valley during the 10 years 1880 to 1889, together with data showing the number and tonnage of side-wheel steamers, stern-wheel steamers, and propellers built during each year in each district. It will be seen from the figures therein presented that while in 1880 30 side-wheelers were built, with an aggregate tonnage of 11,449.60, in 1889 but 2 side-wheelers were built, with an aggregate tonnage of 980.54. At the same time the number of propellers rose from 12 in 1880, with an aggregate tonnage of 689.72, to 16 in 1889, with an aggregate tonnage of 1,286.69, the years 1881, 1882, and 1883 being marked by an exceptional activity in propeller building. The building of stern-wheel steamers of comparatively small tonnage has been marked by very little variation for the past 5 or 6 years.

One of the most interesting in the whole series is Table 29, which gives the amounts appropriated by Congress for the survey, improvement, and maintenance of the water ways of the Mississippi valley from 1819 to 1890, inclusive. Before referring to these figures, however, it would be well to make it clear that the rivers of the Mississippi valley must be consolidated in 3 groups:

First. The rivers, tributaries, and subtributaries making up the fluvial system of the Mississippi valley, irrespective of the questions of navigability or commercial operations.

Second. The rivers of the Mississippi valley which have either been improved or surveyed with a view to improvement by government aid.

Third. The rivers of the Mississippi valley on which a transportation was conducted in 1889.

THE NATURAL GROUP.

The rivers belonging to Group I are as follows: the Mississippi, the Ohio, and the Missouri.

The Ohio is formed by the junction of the Allegheny and Monongahela, which unite at Pittsburg, and these two rivers therefore may rather be considered as rivers of formation than as affluents.

The Allegheny has for its tributaries the Clarion, the Red Bank, and the Kiskiminitas.

Into the Monongahela flow the Buckhannon, the Cheat, and the Youghiogheny.

The tributaries of the Ohio, not considering the Allegheny and Monongahela as such, and which flow into it from the north, are the Muskingum, the Raccoon, the Scioto, the Little Miami, the Miami, and the Wabash.

The subtributaries of this part of the Ohio system are the Mohican, which flows into the Muskingum; the Point, which flows into the Scioto and the Tippecanoe, and the White, with its various forks, flowing into the Wabash.

The tributaries of the Ohio flowing into it from the south are the Little Kanawha, the Great Kanawha, the Guyandotte, the Big Sandy, the Licking, the Kentucky, the Green, the Tradewater, the Cumberland, and the Tennessee.

The Little Kanawha receives as its tributary the Hughes.

The Great Kanawha has several tributaries, chief of which are the Blue Stone, the New, the Greenbrier, the Gauley, the Elk, and the Pocataligo.

The Big Sandy has 3 important tributaries, although they may be considered as forks, their names being the West fork, the Levisa fork, and the Tug fork.

The Green receives the waters of the Rough and Barren.

The Cumberland has a fork, the Caney, and a tributary, the Obey river.

The tributaries of the Tennessee are numerous and mostly important. The list includes Powells, the Clinch, the Holston, the French Broad, the Little Tennessee, the Hiwassee, and the Duck.

The tributaries of the Upper Mississippi which flow into it from the north and east are the Prairie, the Rum, the Saint Croix, the Chippewa, the Black, the Wisconsin, the Galena, the Rock, and the Illinois.

The important tributaries of the Saint Croix are the Yellow and the Totogatic.

The Chippewa has a large tributary named the Flambeau.

Because of an artificial channel the Fox may now be considered as a tributary of the Wisconsin.

The Rock has a tributary named the Green.

The principal tributaries of the Illinois are the Kankakee, the Des Plaines, the Vermilion, the Mackinaw, the Spoon, the Sangamon, and the Fox, which of course must not be confounded with the Fox of Wisconsin.

The tributaries of the Upper Mississippi on the south and west are the Minnesota, the Cannon, the Grand, the Zumbro, the Iowa, the Des Moines, the Salt, and the Cuivre.

The Minnesota has as chief tributaries, the Yellow Medicine and the Chippewa, which must not be confounded with the Chippewa of Wisconsin.

The Red River of the North may now also be considered a tributary of the Minnesota, communication having been effected between the two via Portage lake.

The Iowa has for its tributary the Red Cedar.

The chief tributaries of the Missouri are the Big and Little Sioux, the James or Dakota, the Milk, the Yellowstone, the Little Missouri, the Cheyenne, the White, the Niobrara, the Platte, the Kansas, the Osage, and Gasconade, and the 3 rivers of formation, the Jefferson, the Madison, and the Gallatin.

The chief tributaries of the Yellowstone are the Bighorn and the Powder.

The principal tributaries of the Cheyenne are its forks and the Cherry creek.

The Niobrara has a number of tributaries, the principal of which are the Snake and the Keya Paha.

The Milk river has a number of tributaries, but the most important of them are known either as branches or forks.

The Platte can not be said to have any tributaries of importance, its formation occurring at North Platte, in Lincoln county, Nebraska, by the union of the North and South Platte rivers.

The Kansas has many tributaries, of which the principal are the Delaware, the Vermilion, the Big Blue, the Republican, the Solomon, the Saline, and the Smoky Hill.

The tributaries of the Lower Mississippi which flow into it on the east, omitting of course the Ohio, are the Kaskaskia, the Obion, the Forked Deer, the Big Hatchie, the Yazoo, and the Big Black.

The tributaries of the Forked Deer are all known as forks.

The Yazoo has for its chief tributaries the Big Sunflower, the Coldwater, the Tallahatchie, the Yalobusha, and the Tchula, although this latter is generally called a lake.

The tributaries of the Lower Mississippi which flow into it on the west are the Saint Francis, the Arkansas, the Red, and the Atchafalaya, and the many bayous, chief of which are the Bayou Lafourche and the Bayou Terrebonne.

The Saint Francis receives the waters of the Little (of Missouri) and the L'Anguille.

The White river can no longer be considered an individual affluent of the Lower Mississippi, the latest maps of the United States engineers showing it to empty into the Arkansas a few miles above the junction of that river with the Mississippi. It must therefore at this time be considered as a tributary of the Arkansas.

The other tributaries of the Arkansas are the Cimarron, the Canadian, the Petit Jean, and the Fourche la Fave.

The White has for tributaries the Little Red, the Black (of Missouri), the Current, and Cache creek.

Regarding the Washita and Red rivers, a difference of opinion seems to prevail as to which is the branch and which is the main stream, or whether each is distinct from the other; and, indeed, it is a difficult matter to keep any strict list of these constantly varying rivers. The identification of the streams is made all the more difficult because there are two Washitas and a Wichita. One of the Washitas flows southward through Arkansas into Louisiana, while the other comes down from Indian territory into Texas and joins the Red river not far below the confluence with the Wichita. In the present condition of the rivers, as shown by the engineers' map, it would seem best to set down the Red river as the main stream into which flows the Black as its principal tributary, the Black being made up of the Tensas, the Washita of Arkansas, the Saline, which must not be confounded with the tributary to the Kansas of the same name, and a number of bayous, the principal of which are the Bayou Macon, the Bayou Bœuf, the Bayou Bartholomew, the Bayou D'Arbonne, the Little river (of Arkansas), and the Caney.

THE IMPROVED GROUP.

The rivers belonging to Group II are as follows: the Mississippi, the Missouri, and the Ohio.

The Saint Croix, the Chippewa, the Illinois, the Galena, the Wisconsin by its junction with the Fox, the Minnesota, the Cuivre, and the Red Cedar.

The tributaries of the Ohio which have been improved or surveyed by congressional aid are: the Guyandotte, the Licking, the Tradewater, the Monongahela, the Muskingum, the Little Kanawha, the Great Kanawha, the Big Sandy, the Kentucky, the Green, the Wabash, the Cumberland, and the Tennessee.

The subtributaries which have been improved or surveyed by congressional aid are: the Cheat and the Buckhannon, belonging to the Monongahela; the Elk and the Gauley of the Great Kanawha; the Big fork and the Levisa fork of the Big Sandy; the Rough creek of the Green, and the White river (of Indiana) of the Wabash; the Obey river and Caney fork of the Cumberland, and the Tug, the Clinch, the Hiwassee, the French Broad, and the Little Tennessee of the Tennessee.

The tributaries of the Lower Mississippi which have received congressional aid either for improvement or survey are: the Forked Deer, the Saint Francis, the Big Black, the Big Hatchie, the Kaskaskia, the White, the Arkansas, the Yazoo, the Washita, the Black, and the Red.

The subtributaries of these various streams which have been improved or surveyed under congressional appropriations are: the L'Anguille and the Little (of Missouri), tributaries of the Saint Francis; the Black (of Missouri), the Little Red, and Cache creek, belonging to the White; the Fourche la Fave and the Petit Jean, tributaries of the Arkansas; the Big Sunflower, the Coldwater, the Yalobusha, the Tallahatchie, and the Tchula, tributaries of the Yazoo; the Little Missouri (of Arkansas), the Tensas, and Saline, tributaries of the Washita and Black, and the Little (of Louisiana) and the Caney, tributaries of the Red.

Of the various bayous which may be considered as tributaries to the Lower Mississippi system, those which have been either improved or surveyed by congressional aid are: the Bartholomew, the Black, the Bœuf, the Courtableau, the D'Arbonne, the Lafourche, the Loggy, the Pierre, the Atchafalaya, the Vidal, the Teche, the Terrebonne, the Steel, and the Cypress.

THE COMMERCIAL GROUP.

The rivers belonging to Group III are as follows: the Mississippi, the Ohio, and the Missouri.

Of the Ohio system there are: the Allegheny, the Monongahela with its tributaries, and the Buckhannon; the Little Kanawha, the Great Kanawha with its tributaries, the Elk and the Gauley; the Guyandotte, the Big Sandy, the Licking, the Kentucky, the Green and its tributary, the Barren; the Tradewater, the Cumberland and its tributary, the Caney fork; the Tennessee and its tributaries, the Clinch, the French Broad, and the Hiwassee; the Muskingum, the Wabash and its tributary, the White.

The tributaries of the Upper Mississippi on which a transportation business was done in 1889 were the Saint Croix, the Chippewa, the Minnesota, and the Illinois.

The tributaries of the Missouri on which a transportation business was done in 1889 were the Osage and Gasconade.

The tributaries of the Lower Mississippi system on which a transportation business was done in 1889 were the Saint Francis with its tributaries, the Little and the L'Anguille; the White with its tributaries, the Little Red, the Black, and Cache; the Arkansas and its tributaries, the Petit Jean and the Fourche la Fave; the Red and its tributaries, the Black, the D'Arbonne, the Washita, and the Saline; the Yazoo and its tributaries, the Big Sunflower, the Tallahatchie, and Coldwater; and the Atchafalaya.

The bayous on which a transportation business was done in 1889 were the Bayou Macon, the Bayou Bœuf, the Bayou Courtableau, the Bayou Lafourche, and the Bayou Terrebonne.

EXTENT OF THE MISSISSIPPI VALLEY.

There are no figures at hand from which to give the actual mileage of the streams embraced in Group I, but it is a very conservative estimate to place it at 100,000 miles. The extent of country included in the drainage area of the whole Mississippi valley is something enormous, including over 1,500,000 square miles. In the statistical atlas issued by the census for 1870 the following figures were given as the area of the valley, preceded by the subjoined text:

> The Mississippi system is divided into the basin of the Mississippi, which is again divided as Upper and Lower, by a line drawn between Alton and Cairo; the basins of the Ohio, the Missouri, the Red, the Arkansas, and the Rio Grande (the portions of the latter outside the territory of the United States being excluded from the computation as respects both area and population); * * * the Alabama basin, * * * including large portions of Mississippi on the west and of Georgia and Florida on the east * * *; and, last, the basin of central Texas, embracing all the rivers between the Rio Grande and the Bayou Teche.

	AREA, SQUARE MILES.
Basin of the Upper Mississippi	179, 635
Basin of the Lower Mississippi	65, 646
Basin of the Ohio	207, 111
Basin of the Missouri	527, 690
Basin of the Red	92, 721
Basin of the Rio Grande	101, 334
Basin of the Arkansas	184, 742
The Alabama basin	145, 990
The Texas basin	178, 434
Total	1, 683, 303

The population of this area, it may be added, was 19,111,804 in 1870, the figures having risen to 24,298,332 in 1890. This population is found in those states which are immediately contiguous to the streams found in Group I, which are traversed by them; or in those counties of the states lying immediately within their watershed, as, for instance, those counties of Pennsylvania which constitute the watershed of the Monongahela, Allegheny, and their tributaries. The rims of this great basin extend from the borders of New York to the central ranges of New Mexico, and from the eastern slopes of the Rockies in Montana to the peaks of the Great Smoky mountains of Tennessee.

NAVIGABLE AND UTILIZED WATERS.

The rivers contained in Groups II and III are, after all, those of the most practical importance, and in this respect Table 31 will be found of value. It has been made up in very many particulars from information courteously furnished the Census Office by Major H. M. Adams, of the corps of engineers, United States army, and shows the number of navigable miles of the rivers of the Mississippi valley, as they stood in 1889, and the number of miles over which a transportation business was conducted in the same year. From these parallel columns there can be seen with measurable exactness how many miles of navigable streams had been, so to speak, occupied. Of the navigable length of the great rivers, the Mississippi and Ohio, the whole was of course occupied, but in the various systems it will be seen there were many hundred miles of unemployed water. The navigable miles of the Upper Mississippi system, for instance, numbered 4,486, of which but 4,103 miles were operated on; the Ohio system had 4,406 of navigable miles, of which 4,178 were operated on, while out of the Lower Mississippi system of 6,228 navigable miles but 5,695 were operated on. The total navigable mileage of the valley was 15,410, of which 14,266 were reported on as having been used for purposes of transportation. Many of the unemployed 1,144 miles were probably unavailable during 1889 because of the prevailing low water, to which reference has already been made, while it is also quite within the possibilities that many of the miles of subtributaries were merged within the mileage of the larger streams without being individualized.

CONGRESSIONAL APPROPRIATIONS.

It was for the survey and improvement of these 15,410 miles of navigable rivers that $76,827,463 has been appropriated by the United States government, less a small amount appropriated for the survey of some minor streams which have since been considered unworthy of improvement. Out of this amount, $29,273,189 has been appropriated for the improvement of the Upper Mississippi system, which system, it will be remembered, includes not only the Saint Croix, Chippewa, Illinois, and Missouri, but also the subtributaries of these streams. Out of the $29,273,189, $12,792,679 was appropriated up to and including 1879, the earliest appropriation being made for the Missouri in 1832. In the 10 years 1880 to 1889, $13,234,510 was appropriated for the streams of the Upper Mississippi system, while by the act of Congress passed in September, 1890, $3,246,000 was appropriated.

The total appropriations for the Ohio system. amounted to $21,739,272. Of this amount $9,396,351 was appropriated before or in 1879, the date of the earliest appropriation being 1827, the portion of the Tennessee below Chattanooga being the beneficiary. The balance was made up of $10,011,921, appropriated in the decade 1880 to 1889, and $2,331,000 appropriated by the act of Congress, September, 1890.

The total appropriations for the streams of the Lower Mississippi system were $24,255,002, of which amount $4,604,677 was appropriated before or in 1879, the earliest appropriation being made for the survey of the Lower Mississippi itself in 1819. The appropriations for this system for the decade 1880 to 1889 were quite large, standing at $15,916,125, while the appropriations by the September act of the 1890 Congress amounted to $3,734,200.

Of course the largest appropriations for any one river were those made for the Father of Waters itself; the sum set aside by government for the survey, improvement, and conservation of the whole Mississippi river being $42,086,536, which only leaves $34,740,927 to be divided among all its various affluents, tributaries, and subtributaries. The largest sums out of this remainder were $6,659,250, which was secured by the Missouri; $9,156,313, expended on the Ohio; $4,215,051, given to the Tennessee, and $2,679,500 appropriated for the Great Kanawha. The only other streams which go above the million-dollar limit are the Illinois, $1,588,651; the Kentucky, $1,347,000; the Cumberland, $1,379,500; the Arkansas, $1,296,875, and the Red, $1,733,265.

With respect to the amounts appropriated for the improvement of the Mississippi river, omission should not be made of the explanatory fact that the $42,086,536 only includes the appropriations up to the close of 1890, and for that portion of the river only which extends from the headwaters to New Orleans, that being the only portion of the stream which is included in this report of valley traffic. In the second session of the Fifty-first Congress an additional $1,000,000 was appropriated for the valley portion of the river, while for the improvement of the mouth of the river the appropriations have amounted to $7,597,500. The addition of all these various sums means that for the entire river the appropriations have amounted to $50,684,036.

It may be added that the engineers of the United States army who have been employed on the various works of improving and maintaining navigation state that $28,829,490 is still needed to carry out the contemplated projects. Supposing therefore that $25,000,000 of this amount be granted, it will mean a total appropriation for all the water ways of the Mississippi valley proper of $102,827,463, and for the Mississippi valley and the Gulf portion of the Mississippi river of $110,424,963.

In addition to the tables of appropriations, there is here presented a chart showing the same figures in a more graphic form, the plan of construction being a modification of the genealogical tree.

DIAGRAM SHOWING THE MAIN STREAMS, TRIBUTARIES, AND SUBTRIBUTARIES OF THE GREAT FLUVIAL SYSTEM OF THE MISSISSIPPI VALLEY, WHOSE NAVIGABILITY HAS BEEN IMPROVED OR MAINTAINED BY CONGRESSIONAL APPROPRIATIONS; TOGETHER WITH THE SUMS OF MONEY SO APPROPRIATED FROM THE DATE OF EARLIEST APPROPRIATION UP TO AND INCLUDING THE ACT OF SEPTEMBER, 1890.

THE MISSISSIPPI VALLEY.		MAIN STREAMS OR SYSTEMS.		TRIBUTARIES.			SUBTRIBUTARIES.	
				The Saint Croix		$100, 500		
				The Chippewa		173, 215		
		THE UPPER MISSISSIPPI.		The Illinois		1, 588, 650		
				The Wisconsin (and Fox)		2, 899, 974		
		River	$16, 999, 600	The Minnesota		127, 500		
		Tributaries	5, 614, 339	The Cuivre		12, 000		
				The Red Cedar		1, 500		
		Total for system	22, 613, 939	The Galena		166, 000		
				The Hennepin canal		545, 000		
				All tributaries		5, 614, 339		
		THE MISSOURI.		The Osage		260, 000		
		River	6, 234, 000	The Gasconade		46, 500		
		Tributaries	425, 250	The Yellowstone		118, 750		
		Total for system	6, 659, 250	All tributaries		425, 250		
				The Allegheny		252, 500		
				The Monongahela	$755, 733	774, 233	The Cheat	$13, 000
				Tributaries	18, 500		The Buckhannon	5, 500
				The Muskingum		449, 500		
				The Little Kanawha		211, 175		
				The Great Kanawha	2, 644, 500	2, 679, 500	The Elk	29, 000
				Tributaries	35, 000		The Gauley	6, 000
				The Kentucky		1, 347, 000		
				The Green	135, 000	160, 000	The Rough	25, 000
				Tributary	25, 000			
		THE OHIO.		The Big Sandy	296, 500	301, 500	The Tug fork	2, 500
				Tributaries	5, 000		The Levisa fork	2, 500
		River	8, 867, 313	The Guyandotte		16, 500		
		Tributaries	12, 871, 959	The Cumberland	1, 343, 000	1, 379, 500	Obey river	11, 500
				Tributaries	36, 500		The Caney fork	25, 000
		Total for system	21, 739, 272	The Licking		6, 000		
				The Wabash	706, 000	813, 000	The White, of Indiana	107, 000
				Tributary	107, 000			
THE MISSISSIPPI VALLEY.				Beaver river (dam)		250, 000		
				The Tradewater		16, 500		
Upper Mississippi system	$22, 613, 939						The Duck	13, 000
The Missouri system	6, 659, 250						The Clinch	35, 000
The Ohio system	21, 739, 272			The Tennessee	4, 006, 551	4, 215, 051	The Hiwassee	34, 500
Lower Mississippi system	24, 301, 290			Tributaries	208, 500		The French Broad	121, 000
Whole river, unspecified localities	1, 295, 712						The Little Tennessee	5, 000
				All tributaries	12, 436, 459	12, 871, 959	Subtributaries	435, 500
				Subtributaries	435, 500			
Total for the Mississippi system	76, 609, 463			The Forked Deer		19, 500		
Red River of the North	218, 000			The Saint Francis (and Cache creek)		55, 500		
Grand total for the valley	76, 827, 463			The White, of Arkansas	366, 500	461, 900	The Current	7, 000
				Tributaries	95, 400		The Black, of Missouri	80, 000
							The Little Red	8, 400
				The Big Black		15, 000		
				The Big Hatchie		32, 000		
				L'Anguille		17, 000		
				The Kaskaskia		6, 000		
				The Arkansas	1, 264, 375	1, 296, 875	The Fourche la Fave	26, 500
				Tributaries	32, 500		Le Petit Jean	6, 000
				The Washita	351, 500	414, 000	TheLittleMissouri, Ark.	20, 000
				Tributaries	62, 500		The Saline	21, 500
							The Tensas	21, 000
				The Little, of Missouri		8, 000		
							The Big Sunflower	57, 000
				The Yazoo	215, 000	356, 000	The Coldwater	21, 000
		THE LOWER MISSISSIPPI.		Tributaries	141, 000		Tchula lake	15, 000
							The Yalobusha	11, 000
		River	17. 978, 450				The Tallahatchie	37, 000
		Tributaries	6, 322. 840	The Red river	1, 725, 265	1, 733, 265	The Little, of Louisiana	5, 500
				Tributaries	8, 000		The Caney, via Little	2, 500
		Total for system	24, 301, 290				Bartholomew	33, 000
							Black	25, 000
							Bœuf	31, 000
							Courtableau	31, 200
							D'Arbonne	11. 000
							Lafourche	132, 500
				Bayous		565, 800	Loggy	10, 000
							Pierre	13, 600
							Vidal	2, 000
							Teche	100, 700
							Terrebonne	38, 800
							Cypress	127, 000
							Steels	10, 000
				Miscellaneous		1, 342, 000	Subtributaries	905, 200
				Miscellaneous	1, 342, 000	6, 322, 840		
				All tributaries	4, 075, 640			
				All subtributaries	905, 200			
		Whole river	1, 295, 712	Early appropriations made for whole river without specified localities		1, 295, 712	T. J. V.	

DEVELOPMENT OF AREAS AND INTERESTS.

In a series of resolutions passed by the board of directors of the merchants' exchange of Saint Louis in 1890 it was stated that with the improvement of that portion of the Mississippi below the metropolis of Missouri the increase of exports via the Gulf had kept steady pace, and that from very small beginnings in 1872 they had increased yearly until in 1889 nearly 20 per cent of the entire exports of corn from the United States was by this route. The freight on corn from Saint Louis to New Orleans has been less than 6 cents per bushel, making the freight to Liverpool via the river route less than 17 cents per bushel, and by the maintenance of this rate the rail rate to the east, both for home consumption and for export, was reduced to the minimum, viz, 12.88 cents per bushel, which it is claimed would not have been secured except for the competition of the river route.

In this connection it is interesting to find that the estimate has been made that with the uninterrupted and unimpeded navigation throughout the Mississippi the business of all the river cities would increase at least tenfold.

INCREASE OF NAVIGABLE MILES.

A very instructive lesson in the laws of compensation is furnished by the statistics of water transportation for the Mississippi valley, for while business has decreased in certain localities because of the sharp competition of the railroads running through adjacent and tributary states, this diminution has been more than counteracted by the extension of territory consequent upon the opening up of new streams. The following facts and figures are an evidence:

The improvement of the Washita has considerably enhanced the value of timber lands bordering the stream, and a line of steamers has been started to build up a trade between Arkadelphia and Camden.

Transportation on the Bayou D'Arbonne is now being done by boats of 1,000 bales of cotton capacity, while before the improvement of the bayou it had been restricted to boats of 500-bale capacity.

Before improvements 3 months was the average duration of the navigable season on the Bayou Bartholomew. That time has since been increased to 6 months. The commerce of this bayou included last year the movement of 3,000 bales of cotton, 100,000 sacks of cotton seed, 300,000 staves, 2,000,000 feet of square oak timber, and 3,000,000 feet of cypress logs, besides large quantities of logs and sundries. Before 1881 it required 14 days to make a trip to the head of navigation; now the time has been diminished to 7.

Before the improvements of the Big Sunflower in 1880 the river was navigable for light boats about 6 months in the year. At the present time it is navigable the year round and for much larger boats. The time length of the round trip, 180 miles, has been diminished from 8 to 5 days. All the country adjacent to the river has been rapidly improved. and plantations are being cleared up all along its banks where a few years ago it was a wilderness.

Prior to 1883 the commerce of the Forked Deer river, Tennessee, consisted chiefly of staves and lumber brought out on flatboats and rafts of saw logs, while about 1 boat in 3 was lost. Now the trip is made with safety and with less cost, while the commerce indicates that the whole country along the river is finding an outlet for its products.

The amount of commerce done on the Red river, Arkansas, prior to 1884, amounted to the movement of about 20,000 tons, while the census report for 1889 shows that on this river, together with its tributaries, there were carried and towed no less than 105,145 tons.

OPENING UP NEW COUNTRY.

Already the country contributing to the commerce of the Arkansas river has considerably increased, and it has been calculated that with the further improvement of this river the vast acreage of Indian territory and the products of the large extent of Kansas will find Fort Smith or Little Rock its eventual water outlet. Commencing at the head of navigation on the Arkansas and then following down through the fertile valley tributary to it, the cities of Wichita, Arkansas city, Fort Smith, Dardanelle, Little Rock, and Pine Bluff, 6 of the largest cities in the valley, which, together with their surrounding counties, have a population of over 400,000 inhabitants, depend very largely for their commercial growth and prosperity on the outlet furnished by this river, which in the census year carried 1,663,817 tons of freight. With the continued improvement of this river freights will be still further reduced, fully another million tons of freight will be transported, and the counties of Butler, Chautauqua, Cowley, Elk, Harper, Kingman, Sedgwick, and Sumner, all in Kansas, will be brought into tribute.

When the work of improvement on the Petit Jean, Arkansas, was begun in 1884, commerce on that stream was confined to 2 or 3 high-water trips a year of a light-draft boat, which brought out from 200 to 300 bales of cotton, while now the exports have increased tenfold, and it is estimated that, with the completion of the work, from 5,000 to 6,000 bales of cotton will be annually moved. This stream is the only outlet to the rich Petit Jean valley, while so far the only method of transportation is by wagon, over 1,000 tons of freight being each year brought into the town of Danville, Arkansas, by that means.

A similar condition of affairs exists on the Fourche la Fave, which drains the valley of the same name, a valley which both in mineral and agricultural products is one of the most extensively rich in the state of Arkansas.

Since 1886 the country bordering on the upper reaches of the White river has begun to contribute to the transportation returns of that stream. A marked improvement is noticeable in the agricultural lands, and those products which used to be hauled across the country in wagons from 50 to 80 miles, to Springfield and other points on the railroad, are beginning to find a more accessible outlet by way of the river to Batesville and Newport. In the census year the freight transportation on the White river was 86,393 tons.

The amount of commerce done on the Upper Black in 1880, when the work of improvement was begun, amounted to about 18,000 tons, with perhaps about as much more on the lower river, while the census report for 1889 shows a movement (on the Washita and Black) of 93,707 tons. The vast tract of land through which the Black river runs is said to be susceptible of unlimited development, and it is calculated that the further improvement of the Black river would be the means of opening up at least 1,000,000 acres of rich farm land within a limit of 5 miles on each side of the river, land that has a capacity of producing $25 per acre of cotton or corn.

BUSINESS OF THE TRIBUTARIES.

The commerce of the Tennessee river itself, that is, the commerce originating on that river, can not be said to have increased, but that of its tributaries has been very materially enlarged. The trade of the French Broad, for instance, may be said to have almost come into existence during the 10 years dating from 1880. The commerce has already developed largely, having reached 37,000 tons in 1889, the principal products being marble, logs, lumber, shingles, grain, and general merchandise, while, with the further improvement of the upper waters, the mineral wealth of the mountains lying about the headwaters will seek this river as its highway. The commerce on the Hiwassee, another tributary of the Tennessee, is also increasing, while that of the Clinch has risen from almost nothing to an annual movement of over 60,000 tons during the past 10 years.

Very similar conditions are observable in the case of the tributaries of the Cumberland. The trade of the Cumberland as a river of origin has not perhaps shown any more increase than has the Tennessee, but the commerce of the Caney fork and Obey river has almost entirely come into existence since 1880.

So, too, in the case of the Ohio, Allegheny, Monongahela, and Kentucky. The trade originating on these large streams has not materially, if at all, increased, but new tributaries have been and are being brought into operation year after year, together with the consequent improvement of the adjacent country. The commerce of the Licking, which in the year 1889 amounted to 24,801 tons, may be said to date its activity from 1885, and a similar statement would apply to that of the Buckhannon, Elk, Cheat, and others.

Business on the tributaries of the Upper Mississippi and Missouri has also been marked by a promising extension.

CONDENSED RESULTS.

In looking over the list of rivers which form the great fluvial system of the Mississippi valley, it is found that during the census decade the trade of the valley has received accessions from the opening up of the Licking and Tradewater, tributaries of the Ohio; the Buckhannon and Cheat, tributaries of the Monongahela; the Gauley, a tributary of the Great Kanawha; the Tug fork and Levisa fork, tributaries of the Big Sandy; the Rough and Barren, tributaries of the Green; the South fork, Obey river, and Caney fork, tributaries of the Cumberland; the Duck, Clinch, French Broad, and Little Tennessee, tributaries of the Tennessee; the Forked Deer, Saint Francis, Cache creek, Big Black, Big Hatchie, and Little (of Missouri), tributaries of the Lower Mississippi; the Black (of Missouri) and the Little Red, tributaries of the White; the Petit Jean and Fourche la Fave, tributaries of the Arkansas; the Tchula and the Yalobusha, tributaries of the Yazoo; the Tensas, Macon, and Saline, tributaries of the Washita and Black; the Little (of Louisiana) and the Caney as tributaries of the Red, and a long list of bayous along the Lower Mississippi. The opening up of these streams has meant the addition of 2,840 navigable miles to the valley's total of navigable waters, the development of many thousands of square miles of hitherto unutilized land, the exploitation of rich mines hitherto lying idle, a continuation of low freights which otherwise would have been so high as to seriously embarrass if not practically close the movement of products, and such an addition of traffic that notwithstanding a natural decrease of transportation originating on some rivers the transportation on the fluvial system of the whole valley has received such accessions from these new districts that the freight movement for 1889 stands at 28,293,140 tons against a freight movement of 18,946,522 tons for 1880, an increase for the decade of 9,346,618 tons.

RIVER LANDINGS AND DISTANCES.

This text can not be brought to a better close than by giving a list of the trading points and landings on the chief rivers of the Mississippi valley, and while it would be impossible to present a complete catalogue of these places, the list on the following pages will be found to contain the principal localities. Wherever possible the distance between the points named is given.

MISSISSIPPI RIVER LANDINGS BETWEEN SAINT LOUIS AND SAINT PAUL (DISTANCES FROM SAINT LOUIS).

	Miles.
Saint Louis, Missouri	0
Alton, Illinois	23
Grafton, Illinois	39
Cap au Gris, Missouri	66
Hamburg, Illinois	88
Clarksville, Missouri	102
Louisiana, Missouri	112
Hannibal, Missouri	140
Quincy, Illinois	160
Lagrange, Missouri	170
Canton, Missouri	177
Alexandria, Missouri	196
Warsaw, Illinois	197
Keokuk, Iowa	202
Montrose, Iowa	213
Nauvoo, Illinois	216
Fort Madison, Iowa	224
Pontoosac, Illinois	231
Dallas, Illinois	234
Burlington, Iowa	248
Oquawka, Illinois	261
Keithsburg, Illinois	273
New Boston, Illinois	279
Port Louisa, Iowa	287
Muscatine, Iowa	301
Buffalo, Iowa	319
Rock Island, Illinois	329
Davenport, Iowa	330
Hampton, Illinois	340
Le Claire, Iowa	346
Port Byron, Illinois	347
Princeton, Iowa	352
Cordova, Illinois	353
Comanche, Iowa	362
Albany, Illinois	364
Clinton, Iowa	369
Fulton, Illinois	371
Lyons, Iowa	372
Sabula, Iowa	388
Savanna, Illinois	390
Bellevue, Iowa	410
Dubuque, Iowa	434
East Dubuque, Illinois	435
Wells landing, Iowa	448
Cassville, Wisconsin	463
Glenhaven, Wisconsin	474
Clayton, Iowa	481
Wisconsin river, Wisconsin	488
McGregor, Iowa	492
Prairie du Chien, Wisconsin	500
Lynxville, Wisconsin	517
Lansing, Iowa	529
De Soto, Wisconsin	534
Victory, Wisconsin	540
Bad Axe, Wisconsin	548
Warners landing, Wisconsin	553
Brownsville, Minnesota	561
Lacrosse, Wisconsin	571
Dresbach, Minnesota	579
Trempealeau, Wisconsin	589
Winona, Minnesota	601
Fountain city, Wisconsin	611
Mount Vernon, Minnesota	620
Minneiska, Minnesota	623
Alma, Wisconsin	633
Wabash, Minnesota	642
Reads landing, Minnesota	645
North Pepin, Wisconsin	649
Lake city, Minnesota	655
Wacouta, Minnesota	669
Red Wing, Minnesota	676
Trenton, Wisconsin	680
Diamond Bluff, Wisconsin	686
Prescott, Wisconsin	698
Hastings, Minnesota	701
Newport, Minnesota	720
Saint Paul, Minnesota	729

MISSISSIPPI RIVER LANDINGS BETWEEN CAIRO AND SAINT LOUIS (DISTANCES FROM CAIRO).

Cairo, Illinois	0
Birds, Missouri	0
Saint Louis, Iron Mountain and Southern railway, Missouri	2
Greenfields, Missouri	4
Pond Lily, Missouri	8
Ables Field, Illinois	10
Greenleafs, Illinois	11
Brewers, Missouri	13
Thompsons, Missouri	15
Orient Field, Missouri	17
Saladin Field, Missouri	19
Haughs landing, Missouri	19
Dogtooth island, Illinois	19
Brooks point (Simons), Illinois	20
Davis, Illinois	21
Browns, or Berrys, Illinois	22
Prices landing, Missouri	24
Daniels landing, Missouri	25
West Philadelphia, Missouri	27
Commercial point, Illinois	27
Athertons Goose Island landing, Illinois	30
Jones, or Davis Store, Illinois	31
Horse Shoe, Athertons, Illinois	31
Burnham island, Jones, Illinois	34
Santa Fe, Illinois	35
Commerce, Missouri	35
Uncle Joes, Missouri	38
Thebes, Illinois	40
Doughertys, Missouri	40
Grays point, Missouri	43
Jones, Missouri	46
College farm, Missouri	47
Cape Girardeau, Missouri	50
Wauhoo, Illinois	52
Randals, Illinois	54
Hobbs, Missouri	55
Mintons point, Illinois	55
Devils island (McClures), Illinois	57
Kinney point, Missouri	57
Taylors, Missouri	58
Davidsons, Missouri	59
Widow Poes, Missouri	59
Shepherd, jr., Missouri	59
Schatts, Missouri	60
Bainbridge, Missouri	61
Hamburg, Illinois	61
Widow Shepherds, Missouri	62
Willards, Illinois	65
Moccasinville, Missouri	65
Vancils, Missouri	66
Neeleys landing, Missouri	70
Crawfords, Missouri	75
Springs, or Bennetts, Illinois	75
Preston, or Union point, Illinois	76
Hines landing, Missouri	76
Birmingham, Missouri	77
Sauls, Illinois	78
Grand Tower, Illinois	80
Wittenburg, Missouri	82
Shipyard, Illinois	83
Youngs, Missouri	85
Gills, Missouri	85
Estells, Illinois	88
Burfords, Missouri	92
'76 landing, Missouri	93
Wilkinsons island, Illinois	96
Wilkinsons, Missouri	96
Baileys, Missouri	100
Wilkinsons, Illinois	103
Prices, Illinois	104
Ryans, Illinois	104
McLeans, Illinois	106
Excelsior, or Jones, Missouri	106
Hamiltons, Illinois	107
Rockwood, Illinois	110
Nicks landing, Missouri	113
Boise Brule, Missouri	114
Allens, Missouri	114
Waters, Missouri	115
Mancoes, Illinois	115
Darwins, Illinois	116
Coles mill, Illinois	119
Clareyville, Missouri	120
Chester, Illinois	120
Caldwell, Missouri	125
Logans, Missouri	125
Roziers, Missouri	127
Saint Marys, Missouri	128
Whelans, Illinois	129
Bogys, Missouri	129
Quarry town, Missouri	131
Stones, Illinois	134
Kaskaskia, Illinois	135
Saint Genevieve, Missouri	140
Mudds point, Illinois	142
Little Rock, Missouri	142
Sand depot, Missouri	146
Fort Chartres, Frank Brickleys, Illinois	150
Salt point, or Clifton, Missouri	150
Jim Snells, Missouri	152
Sycamore landing, Illinois	153
Cliff, or John Brickeys, Missouri	153
Morrisons, Missouri	154
Salt lake, Illinois	154
Walkers, Illinois	155
Goodmans, Illinois	157
Rush Tower, or Perrys, Missouri	160
Forest Home, Illinois	164
Lilleys, Missouri	165
Selina, Missouri	165
Hugs island, Missouri	168
Crystal city, Missouri	168
Platin Rock, Missouri	169
Knowlens, Illinois	171
Harrisonville, Illinois	172
Bushburg, Missouri	174
Sulphur Springs, Missouri	176
Kimmswick, Missouri	178
Kirks landing, Illinois	180
Jim Smiths, or Hurricane point, Illinois	180
Pull Tight, Illinois	184
Quarantine, Missouri	186
Jefferson barracks, Missouri	188
Saint Louis, Missouri	200

MISSISSIPPI RIVER LANDINGS BETWEEN CAIRO AND NEW ORLEANS (DISTANCES FROM CAIRO).

	Miles.
Cairo, Illinois	0
Norfolk landing, Missouri	7
O'Briens, Missouri	14
Columbus, Kentucky	21
Belmont, Missouri	21
Farris landing, Missouri	29
Hickman, Kentucky	36
Frenchs point, Kentucky	42
Saint James bayou, Missouri	44
La Valles landing, Missouri	47
Newsoms landing, Missouri	49
Lesters landing, Kentucky	53
Kentucky and Tennessee state line	55
Port Polk, Tennessee	57
Stewarts landing, Tennessee	59
Tolers landing, Tennessee	61
Kentucky and Tennessee state line	63
Morrisons landing, Missouri	69
Watsons point, Kentucky	69
New Madrid, Missouri	70
Lower Madrid landing, Missouri	71
Nolands landing, Kentucky	75
Toney landing, Missouri	75
Marrs landing, Tennessee	77
Darnells landing, Tennessee	78
Point Pleasant, Missouri	79
Williams landing, Missouri	80
Phillips landing, Missouri	81
Lazells landing, Missouri	82
Ruddles landing, Missouri	84
Tiptonville, Tennessee	85
Shaws landing, Tennessee	85
Reelfoot landing, Tennessee	86
Rileys landing, Tennessee	87
Stewarts landing, Missouri	89
Batsells landing, Missouri	90
Atkinsons landing, Missouri	91
Stewarts lower landing, Missouri	94
Bass landing, Tennessee	95
D. Phillips landing, Missouri	96
Reelfoot landing, Tennessee	98
Le Dukes landing, Tennessee	101
Hathaways landing, Tennessee	102
Gayoso, Missouri	105
Ferris landing, Missouri	108
Caruthersville, Missouri	110
Linwood landing, Tennessee	115
Booths Point landing, Tennessee	117
Loves landing, Tennessee	120
Pates landing, Tennessee	121
Mitchells landing, Tennessee	122
Cottonwood Point landing, Missouri	123
Helms landing, Missouri	123
Lintdale landing, Missouri	125
Midway landing, Missouri	126
Missouri and Arkansas state line	127
Secoy landing, Arkansas	128
Meadows landing, Arkansas	128
Hoffman landing, Arkansas	129
Hickmans landing, Arkansas	131
Wrights Point landing, Arkansas	134
Mouth of Obion river, Tennessee	135
Hales Point landing, Tennessee	135
Nebraska landing, Tennessee	138
Buckners landing, Arkansas	140
Snows landing, Arkansas	140
Barfield landing, Arkansas	141
Wards landing, Arkansas	148
O'Donnells landing, Arkansas	149
Ashport, Tennessee	153
Mud Point landing, Tennessee	154
Johnsons landing, Tennessee	156
Fletchers landing, Arkansas	158
Elmot landing, Arkansas	160
Plum point, Tennessee	164
Osceola, Arkansas	164
Drivers landing, Arkansas	166
Tanzals landing, Arkansas	167
Fort Pillow, Tennessee	172
Hatchie landing, Tennessee	173
Fulton, Tennessee	175
Falls landing, Arkansas	175
Dixie landing, Island 34, Arkansas	178
Jones landing, Island 34, Arkansas	178
Mouth of Hatchie river, Tennessee	179
Randolph, Tennessee	182
Fort Wright, Tennessee	184
Richardsons landing, Tennessee	185
Prestons landing, Arkansas	186
Hampson & Fergusons landing, Arkansas	188
Idaho landing, Arkansas	191
Golden Lake landing, Arkansas	191
Tuckers landing, Arkansas	193
Pecan Point landing, Arkansas	196
Deans landing, Arkansas	197
Andrews landing, Arkansas	198
Thomas landing, Tennessee	201
Corona landing, Arkansas	203
Randolph point, Tennessee	210
Woodwards landing, Arkansas	212
Eldorado, Arkansas	212
Bradleys landing, Arkansas	214
Hollybush landing, Arkansas	219
Redmans landing, Arkansas	220
Mound city landing, Arkansas	226
Mouth of Loosahatchie river, Tennessee	229
Hopefield, Arkansas	229
Mouth of Wolf river, Tennessee	229
Memphis, Tennessee	230
Forrest landing	233
Lakes landing, Arkansas	236
McConnells landing, Arkansas	238
Rowleys landing, Arkansas	238
Jones landing, Arkansas	238
Reeves landing, Arkansas	243
Harris landing, Arkansas	244
Horn Lake landing, Tennessee	244
Collins landing, Tennessee	245
Scanlans landing, Arkansas	247
Fairview landing, Arkansas	251
Pinkney's landing, Arkansas	252
Cat Island landing, Arkansas	252
Norfolk landing, Mississippi	254
Star landing, Mississippi	258
Harcklerodes landing, Arkansas	259
Bennetts landing, Mississippi	263
Polks landing, Mississippi	264
Commerce landing, Mississippi	269
Peters landing, Arkansas	271
Campbells landing, Arkansas	272
Ashley Point landing, Arkansas	274
Mhoons landing, Mississippi	275
Bordeaux Point landing, Arkansas	278
Walnut Bend landing, Arkansas	282
Smiths landing, Arkansas	285
Frederick landing, Mississippi	287
Austin landing, Mississippi	288
O. K. landing, Mississippi	289
Harberts landing, Mississippi	292
Sterling, Arkansas, mouth Saint Francis river	297
Trotter landing, Mississippi	304
Helena, Arkansas	306
Glendale, Mississippi	306
Williams landing, Arkansas	309
Thompsons landing, Mississippi	312
Delta, Mississippi	314
Craigs landing, Arkansas	316
Westover landing, Arkansas	318
Friars point, Mississippi	319
Old Town landing, Arkansas	324
Allisons landing, Arkansas	327
Hulberton, Mississippi	333
Modoc landing, Arkansas	334
Hugheys landing, Arkansas	336
Jacksons Point landing, Mississippi	341
Ludlows landing, Arkansas	346
Saint Louis landing, Arkansas	349
Sunflower landing, Mississippi	352
Robinsonville landing, Mississippi	354
New Hope landing, Mississippi	355
Malones landing, Mississippi	356
Lake Charles landing, Mississippi	357
Andersons landing, Mississippi	359
Pushmataha landing, Mississippi	359
Ludlows landing, Arkansas	359
Crows landing, Mississippi	365
Beiths landing, Arkansas	366
Parkers landing, Mississippi	367
Australia, Mississippi	369
Australia landing, Mississippi	370
Dyers landing, Mississippi	370
Dennis landing, Mississippi	372
Laconia, Arkansas	373
Lulu landing, Arkansas	376
Concordia, Mississippi	378
Maysonia, Mississippi	378
Hills landing, Arkansas	380
Frawleys landing, Mississippi	382
Henrico landing, Arkansas	383
Graddys landing, Arkansas	384
McGehees landing, Mississippi	391
Waxhaw landing, Mississippi	392
Mouth of White river, Arkansas	393
Terrene, Mississippi	394
Cumbyville, Arkansas	394
Malones landing, Arkansas	397
Rosedale landing, Mississippi	398
Riverton landing, Mississippi	399
Black Hawk landing, Arkansas	401
Mouth of Arkansas river, Arkansas	401
Glen Lou landing, Arkansas	401
Prentiss landing, Mississippi	403
Holly Ridge landing, Arkansas	411
Caulks landing, Arkansas	413
Nibletts landing, Mississippi	414
Bolivar landing, Mississippi	416
Buck Ridge landing, Mississippi	418
Kentucky landing, Mississippi	418
Home landing, Mississippi	419
Content landing, Mississippi	420
Williams landing, Arkansas	420
Franklin landing, Mississippi	422
Catfish Point landing, Mississippi	423
Good Luck landing, Arkansas	423
Cypress Creek landing, Arkansas	426
Lucca landing, Arkansas	427
Chicora landing, Arkansas	429
Chicot, Arkansas	431
Eutaw landing, Mississippi	433
Jenkins landing, Mississippi	433
Stop landing, Mississippi	434
Easton landing, Mississippi	434
Mound landing, Mississippi	435
Glencoe landing, Mississippi	436

MISSISSIPPI RIVER LANDINGS BETWEEN CAIRO AND NEW ORLEANS (DISTANCES FROM CAIRO)—Continued.

	Miles.
Delolme landing, Mississippi	436
Arkansas city, Arkansas	438
Offutts landing, Mississippi	444
Gaines landing, Arkansas	449
Point Comfort landing, Arkansas	454
Woodstock landing, Mississippi	464
Linwood landing, Arkansas	464
Bellevue landing, Arkansas	465
Luna landing, Arkansas	467
Columbia landing, Arkansas	469
Chicot landing, Arkansas	473
Barns landing, Mississippi	476
Greenville, Mississippi	478
Craigs landing, Arkansas	483
Jones landing, Arkansas	485
Vaucluse landing, Arkansas	486
Sunnyside landing, Arkansas	490
Refuse, Mississippi	491
Lakeport landing, Arkansas	495
Island 86 landing, Arkansas	501
Longwood landing, Mississippi	501
Lake Washington landing, Mississippi	504
Grand Lake landing, Arkansas	510
Leota landing, Mississippi	511
Cracraft landing, Arkansas	513
Sterling landing, Arkansas	515
Carolina landing, Mississippi	516
Ashton landing, Arkansas	520
Pilchers Point landing, Louisiana	523
Pitmans landing, Louisiana	525
Bunchs landing, Louisiana	528
Duncansby landing, Mississippi	529
Skipworth landing, Mississippi	530
Wilsons Point landing, Louisiana	531
Wilderness landing, Mississippi	531
Cottonwood landing, Louisiana	534
Homochitta landing, Mississippi	535
Holly Ridge landing, Mississippi	536
Vista landing, Louisiana	536
Longwood landing, Louisiana	537
Oakley landing, Mississippi	537
Reserve landing, Mississippi	537
Arlington landing, Louisiana	541
Ben Lomond landing, Mississippi	541
Lake Providence, Louisiana	542
Shipland landing, Mississippi	544
Halls landing, Mississippi	552
Tallula landing, Mississippi	552
Bass landing, Louisiana	552
Hays landing, Mississippi	553
Shiloh landing, Mississippi	554
Christmas landing, Mississippi	555
Cottonwood landing, Mississippi	556
Arcadia landing, Mississippi	557
Wilton landing (upper), Louisiana	559
Wilton landing (lower), Louisiana	560
Alsatia landing, Louisiana	561
Melville landing, Louisiana	562
Edgewood landing, Louisiana	563
Raleigh landing, Louisiana	564
Tennessee landing, Mississippi	564
Pecan Grove landing, Louisiana	566
Chotard landing, Mississippi	570
Brunswick landing, Mississippi	573
Henderson landing, Louisiana	573
Villa Vista landing, Louisiana	574
Omega landing, Louisiana	578
Rose Hill landing, Louisiana	579
Millikens Bend landing, Louisiana	581
Cabin Teele landing, Louisiana	584
Forest Home landing, Mississippi	581
Halpino landing, Mississippi	585
Sparta, or Duckport landing, Louisiana	589
Nebraska landing, Louisiana	591
Youngs Point landing, Louisiana	593
Mouth of Yazoo river, Mississippi	594
Butler landing, Mississippi	594
Kings Point landing, Mississippi	596
Vicksburg, Mississippi	599
Delta, Louisiana	597
Bedfords landing, Louisiana	606
Warrenton, Mississippi	606
Oak Bend landing, Mississippi	609
Diamond point, Mississippi	611
Moores landing, Louisiana	614
Kelloggs landing, Louisiana	616
Upper New Town, Mississippi	618
Lower New Town, Louisiana	618
Point Pleasant landing, Louisiana	622
Blands store, Louisiana	623
Buck Ridge landing, Louisiana	624
Brooks landing, Mississippi	626
Wilsons Point landing, Louisiana	630
Ship Bayou landing, Louisiana	631
Hard Times landing, Louisiana	633
Grand Gulf, Mississippi	636
Whitehall landing, Mississippi	637
Hardscrabble, Louisiana	640
Bruensburg landing, Mississippi	643
Bondurant, Louisiana	643
Saint Joseph, Louisiana	648
Rodney Ferry landing, Louisiana	651
Rodney, Mississippi	652
Gilliams landing, Mississippi	654
Beelers landing, Louisiana	655
Kemps landing, Louisiana	659
Waterproof, Louisiana	663
Durango landing, Louisiana	668
Cypress Grove landing, Mississippi	669
Coles Creek landing, Mississippi	672
Kings woodyard, Mississippi	674
Rosedale landing, Louisiana	674
Habbards landing, Mississippi	675
Mercer landing, Mississippi	677
L'Argent, Louisiana	679
Mononar landing, Louisiana	680
Hole in Wall landing, Louisiana	680
Covington landing, Louisiana	680
Gibbons landing, Louisiana	683
Good Hope landing, Louisiana	691
Stacy plantation, Louisiana	698
Natchez, Mississippi	698
Vidalia, Louisiana	698
Arnolla landing, Louisiana	700
Whitehall landing, Louisiana	701
Boles Point landing, Louisiana	705
Morville landing, Louisiana	708
Hutchins landing, Mississippi	713
Avalanche landing, Mississippi	716
Fairview landing, Louisiana	725
Jacksons point, Mississippi	735
Ashland landing, Louisiana	735
Bougeres landing, Louisiana	735
Union Point landing, Louisiana	740
Kienstia landing, Mississippi	740
Black Hawk landing, Louisiana	745
Black Hawk Point landing, Louisiana	748
Stamps landing, Mississippi	748
Bartlett plantation, Mississippi	750
Knoxs landing, Louisiana	751
Fort Adams landing, Mississippi	753
Point Breeze, Louisiana	756
Langside, Mississippi	756
Tarbert, Mississippi	757
Car Point landing, Louisiana	760
Angola landing, Louisiana	762
Mouth of Red river, Louisiana	762
Red River landing, Louisiana	763
Smiths landing, Louisiana	765
Miles landing, Louisiana	765
Coal landing, Louisiana	770
Upper Tunica landing, Louisiana	770
Lower Tunica landing, Louisiana	771
Greenwood landing, Louisiana	775
Sebastopol, Louisiana	780
Raccourci landing, Louisiana	782
New Texas landing, Louisiana	783
Morganza landing, Louisiana	786
Point Coupee, Louisiana	793
Bayou Sara, Louisiana	797
Waterloo, Louisiana	803
Hermitage landing, Louisiana	805
Port Hickey landing, Louisiana	808
Kelson landing, Louisiana	811
Highland landing, Louisiana	813
Lower Springfield landing, Louisiana	816
Grossmans landing, Louisiana	820
Barroza landing, Louisiana	821
Lobdells landing, Louisiana	823
Quornor landing, Louisiana	824
Point Lace landing, Louisiana	826
Port Allen, Louisiana	830
Baton Rouge, Louisiana	831
Cinclare landing, Louisiana	835
Missouri landing, Louisiana	837
Manchac landing, Louisiana	843
Brooksville landing, Louisiana	847
Plaquemine landing, Louisiana	851
Forlorn Hope landing, Louisiana	856
Arcadia landing, Louisiana	857
Browns landing, Louisiana	859
Dunboine landing, Louisiana	862
Ophelia landing, Louisiana	862
Bayou Goula landing, Louisiana	864
Belle Grove landing, Louisiana	867
Cannon Store landing, Louisiana	868
Hard Times landing, Louisiana	869
Southwood landing, Louisiana	872
Woodstock landing, Louisiana	875
Linwood landing, Louisiana	875
Ashland landing, Louisiana	876
Ascension landing, Louisiana	879
Evan Hall landing, Louisiana	880
Ferry landing, Louisiana	883
Donaldsonville, Louisiana	883
Bateau, or Larcular landing, Louisiana	885
Whitehall landing, Louisiana	891
College point, Louisiana	901
Mount Airy plantation, Louisiana	913
Terre Haute plantation, Louisiana	918
Bonnet Carre, Louisiana	924
Hermitage plantation, Louisiana	930
Prospect plantation, Louisiana	933
Hahnville, Louisiana	933
Speranza plantation, Louisiana	935
Destraban plantation, Louisiana	937
Lone Star plantation, Louisiana	938
Kennerville, Louisiana	945
Twelve Mile point, Louisiana	949
Jefferson, Louisiana	949
Nine Mile point, Louisiana	953
Carrollton, Louisiana	955
Gretna, Louisiana	960
New Orleans, Louisiana	961

OHIO RIVER LANDINGS BETWEEN PITTSBURG AND CAIRO (DISTANCES FROM PITTSBURG).

	Miles.
Pittsburg, Pennsylvania	0
Saw Mill run, Pennsylvania	2
Corks run, Pennsylvania	3
Chariers creek, Pennsylvania	3
Jacks run, Pennsylvania	5
Horsetail ripple, Pennsylvania	6
Lowries ripple, Pennsylvania	7
Duffs bar, Pennsylvania	8
Merrimans ripple, Pennsylvania	10
Whites ripple, Pennsylvania	11
Deadmans island, Pennsylvania	14
Flathertys run, Pennsylvania	15
Big Sewickley creek, Pennsylvania	16
Little Sewickley creek, Pennsylvania	17
Logstown bar, Pennsylvania	19
Baden, Pennsylvania	21
Freedom, Pennsylvania	24
Lacocks bar, Pennsylvania	25
Big Beaver river, Pennsylvania	25
Vanport, Pennsylvania	28
Raccoon bar, Pennsylvania	29
Raccoon creek, Pennsylvania	30
Montgomery island, Pennsylvania	32
Safe Harbor, Pennsylvania	32
Shippenport, Pennsylvania	35
Potts run, Pennsylvania	37
Little Beaver river, Pennsylvania	40
Boundary line, Pennsylvania and Ohio	41
Liverpool, Ohio	44
Wellsville, Ohio	48
Yellow creek, Ohio	50
Tumblesons run, West Virginia	53
New Cumberland, West Virginia	56
Kings creek, Ohio	60
Cables eddy, Ohio	64
Steubenville, Ohio	68
Wellsburg, West Virginia	74
Beech Bottom bar, Ohio	78
Warrenton, Ohio	81
Pike island, Ohio	83
Burlington, Ohio	86
Martinsville, Ohio	89
Wheeling (creek), West Virginia	90
McMahons Creek bar, Ohio	94
Kates rock, West Virginia	97
Middle of Little Grave Creek bar, Ohio	100
Moundsville, West Virginia	101
Captina creek, Ohio	109
Fish creek, West Virginia	113
Sunfish creek, Ohio	117
Proctors run, West Virginia	121
Fishing creek, West Virginia	127
Sardis, Ohio	130
Whittons house, Ohio	134
Sisterville, West Virginia	136
Matamoras, Ohio	141
Petticoat bar, Ohio	147
Reas run, West Virginia	151
Saint Marys, West Virginia	155
Newport, Ohio	156
Cow creek, West Virginia	161
Carpenters bar, Ohio	166
Marietta, Ohio	171
Briscoe run, West Virginia	177
Cole island, Ohio	181
Kanawha river, Parkersburg, West Virginia	184
Blennerhassets island, foot, West Virginia	189
Hockingport, Ohio	191
Newberry bar, Ohio	193
Big Hockhocking, Ohio	198
Bellville island, Ohio	202
Murraysville, West Virginia	207
Portland, Ohio	214
Ravenswood, West Virginia	219
Goose island, Ohio	228
Letart falls, Ohio	231
Grahams station, West Virginia	239
Hartford city, West Virginia	244
Pomeroy, Ohio	249
Eight Mile island, Ohio	255
Campaign creek, Ohio	260
Big Kanawha river, West Virginia	264
Gallipolis, Ohio	267
Carrion ripple, Ohio	271
Raccoon island, Ohio	273
Chambersburg, Ohio	278
Bladensburg, Ohio	279
Eighteen Mile creek, Ohio	283
Little Guyandotte river, West Virginia	285
Green Bottom ripple, Ohio	290
Millersport and Federal creek, Ohio	293
Haskellville, Ohio	295
Dogham bar, Ohio	299
Big Guyandotte river, West Virginia	303
Symms creek, Ohio	306
Buffalo creek bar, Ohio	308
Burlington, Ohio	311
Ceredo, West Virginia	312
Catlettsburg, Kentucky	315
Sheridan coal works, Ohio	318
Ashland, Kentucky	320
Ironton, Ohio	325
Hanging Rock, Ohio	328
Union landing, Ohio	330
Greenupsburg, Kentucky	334
Burks point, Ohio	341
Pine creek, Ohio	345
Sciotoville, Ohio	347
Tiger creek, Kentucky	351
Portsmouth, Ohio	354
Turkey creek, Ohio	359
Quincy, Kentucky	364
Rock Port, Kentucky	368
Buena Vista, Ohio	371
Rockville, Ohio	372
Vanceburg, Kentucky	375
Rome, Ohio	381
Brush creek, Ohio	385
Concord, Kentucky	387
Wrightsville, Ohio	389
Manchester, Ohio	394
Cabin creek, Kentucky	400
Brooks bar, Ohio	402
Maysville, Kentucky	406
Charleston bar, Ohio	412
Ripley, Ohio	414
Levana, or Dover, Ohio	416
Straight creek, Ohio	418
Higginsport, Ohio	422
Augusta, Kentucky	424
Utopia, Ohio	427
Bull creek, Ohio	428
Chilo, Ohio	431
Neville, Ohio	435
Fosters landing, Kentucky	435
Moscow, Ohio	439
Point Pleasant, Ohio	442
New Richmond, Ohio	446
Palestine, Ohio	450
Buzzards roost, Ohio	454
Little Miami river, Ohio	460
Jamestown, Kentucky	464
Cincinnati, Ohio	467
Sedamsville, Ohio	470
McCulloms bar, Ohio	472
Andersons ferry, Ohio	474
Rapid run, Ohio	477
Taylorsville, Kentucky	478
Muddy creek, Ohio	480
Chamberlains, Kentucky	482
Indian creek, Ohio	482
Big Miami, Ohio and Indiana boundary	487
Lawrenceburg, Indiana	489
Petersburg landing, Kentucky	491
Aurora, Indiana	493
Loughreys creek, Indiana	495
Kirbys rock, Indiana	496
Loughreys island, Indiana	498
Rising Sun, Indiana	502
Arnolds creek, Indiana	505
Gunpowder creek, Kentucky	510
Big Boone creek, Kentucky	513
Goose creek, Indiana	514
Patriot, Indiana	515
Sugar creek, Kentucky	519
Bryants creek, Indiana	523
Warsaw, Kentucky	524
Florence, Indiana	525
Craigs creek, Indiana	526
Storns creek, Indiana	527
Loglick creek, Indiana	529
Vevay island, Indiana	532
Vevay, Indiana, and Ghent, Kentucky	533
Indian creek, Kentucky	536
Craigs bar, Indiana	537
Carrolton, Kentucky	541
Notchlick creek, Kentucky	544
Captain J. Armstrongs, Indiana	544
Locust creek, Kentucky	545
Indian, Indiana	546
Eagle Hollow, Indiana	551
Lonesome Hollow, Indiana	551
Madison, Indiana	553
Clifty creek, Indiana	556
Hanover landing, Indiana	558
Reeds landing, Indiana	562
New London, Indiana	563
Big Solady creek, Indiana	565
Corn creek, Kentucky	567
Bethlehem, Indiana	570
Westport, Kentucky	576
Eighteen Mile island, Indiana	578
Herculaneum, Kentucky	581
Fourteen Mile creek, Indiana	586
Charleston landing, Indiana	587
Twelve Mile island, Indiana	589
Utica, Indiana	592
Six Mile island, Indiana	593
Louisville, Kentucky	596
Jeffersonville, Indiana	596
Silver creek, Indiana	601
New Albany, Indiana	603
Middle creek, Indiana	608
Hughes bar, Indiana	609
Knob creek, Indiana	612
Christopher crossing, Kentucky	617
Salt river, Kentucky	624
New Boston, Kentucky	628

OHIO RIVER LANDINGS BETWEEN PITTSBURG AND CAIRO (DISTANCES FROM PITTSBURG)—Continued.

	Miles.
Otter creek, Kentucky	631
Tobacco landing, Kentucky	635
Brandenburg, Kentucky	640
Maucport, Indiana	643
Amsterdam, Indiana	650
Head of Upper Blue River island, Indiana	654
Leavenworth, Indiana	658
Fredonia, Indiana	661
Schooner point, Indiana	664
Hawkins landing, Kentucky	668
Peckenpaws landing, Kentucky	669
Wolf creek, Kentucky	671
Little Blue river, Indiana	673
Alton, Indiana	673
Reno, Indiana	677
Hatfields house, Kentucky	679
Concordia, Kentucky	681
Davis landing, Indiana	682
Oil creek, Indiana	686
Derby, Indiana	687
Yellow Bank creek, Kentucky	690
Shenautts Reach, foot, Kentucky	692
Steavens port, Kentucky	695
Bear creek, Kentucky	697
Holts bar, Kentucky	698
Gregorys, Kentucky	703
Cloverport, Kentucky	705
Faucetts creek, Indiana	706
Nillston creek, Indiana	711
Rock island, Kentucky	713
Hawsville, Kentucky	717
Tell city, Indiana	720
Troy, Indiana	724
Lewisport, Kentucky	731
Grandview, Indiana	736
Honey creek, Indiana	739
Rockport, Indiana	741
Upper Yellow Bank island, head, Indiana	745
Owensboro, Kentucky	749
Bonharbor, Kentucky	752
Enterprise, Indiana	756
Point Isabel, Indiana	758
French island, Kentucky	760
Pigeon creek, Indiana	766
Cypress creek, Indiana	768
Newburg, Indiana	770
Green river, Kentucky	775
Evansville, Indiana	783
Henderson, Kentucky	795
Henderson, Indiana	796
West Franklin, Indiana	808
Diamond island, foot, Indiana	812
Mount Vernon, Indiana	819
Slim island, head, Indiana	822
Slim island, foot, Indiana	826
Louisiana rocks, Kentucky	831
Uniontown, Kentucky	833
Lower Highland rocks, Kentucky	834
Head Wabash island, Indiana	836
Wabash river, Illinois and Indiana boundary	838
Fort Wabash island, Indiana	841
Raleigh, Kentucky	843
Shawneetown, Illinois	848
Coal banks, Illinois	850
Saline river, Illinois	857
Shotwells coal bank, Illinois	859
Caseyville, Kentucky	861
Treadwater river, Kentucky	862
Weston, Kentucky	865
Fords ferry, Kentucky	866
Cave in Rock, Illinois	869
Head Big Hurricane island, Kentucky	873
Elizabethtown, Illinois	877
Roseclair, Illinois	880
Carrsville, Kentucky	882
Golconda, Illinois	890
Prior island, Kentucky	893
Head Sisters island, Kentucky	896
Bay city, Illinois	899
Head Stewarts island, Illinois	901
Head Dry island, Illinois	906
Smithland, Kentucky	908
Pull Tight, or West Liberty, Kentucky	910
Paducah, Kentucky	920
Brooklyn, Illinois	923
Metropolis, Illinois	929
Hillermans, Illinois	939
Caledonia, Illinois	951
Mound city, Illinois	959
Cairo, mouth of Ohio river, Illinois	967

MISSOURI RIVER LANDINGS BETWEEN SAINT LOUIS AND FORT BENTON (DISTANCES FROM SAINT LOUIS).

Saint Louis, Missouri	0
Mouth of Missouri, Missouri	20
Jefferson city, Missouri	164
Glasgow, Missouri	212
Lexington, Missouri	337
Kansas city, Missouri	405
Leavenworth, Kansas	438
Saint Joseph, Missouri	501
Omaha, Nebraska	686
Sioux city, Iowa	861
Vermilion, Kansas	953
Yankton, South Dakota	1,006
Fort Randall, South Dakota	1,102
Brule city, South Dakota	1,192
Brule agency, South Dakota	1,223
Fort Hale, South Dakota	1,223
Fort Thompson, South Dakota	1,230
Head of Big Bend, South Dakota	1,270
Old Fort Pierre, South Dakota	1,330
Black Hills landing, South Dakota	1,330
Fort Sully, South Dakota	1,359
Cheyenne agency, South Dakota	1,371
Fort Bennett, South Dakota	1,371
Grand River agency, South Dakota	1,479
Standing Rock agency, South Dakota	1,535
Fort Yates, North Dakota	1,535
Fort Rice, North Dakota	1,569
Fort Lincoln, North Dakota	1,609
Bismarck, North Dakota	1,614
Mandan, North Dakota	1,617
Fort Stevenson, North Dakota	1,724
Port Berthold, North Dakota	1,749
White Earth river, North Dakota	1,869
Fort Buford, North Dakota	1,994
Mouth of Yellowstone, North Dakota	1,996
Mouth of Little Muddy, Montana	2,016
Mouth of Big Muddy, Montana	2,046
Mouth of Poplar creek, Montana	2,096
Spread Eagle, Montana	2,121
Wolf Creek agency, Montana	2,147
Porcupine creek, Montana	2,177
Milk river, Montana	2,202
Fort Copelin, Montana	2,212
Fort Peck, Montana	2,227
Bouches Grave, Montana	2,267
Round Butte, Montana	2,304
Trover Point, Montana	2,344
Mussellshell river, Montana	2,387
Fort Hawley, Montana	2,424
Carroll, Montana	2,446
Little Rocky, Montana	2,461
Harrietts island, Montana	2,473
Two Calf island, Montana	2,488
Cow island, Montana	2,508
Buds rapids, Montana	2,523
Dauphins rapids, Montana	2,538
Fort Claggett, Montana	2,561
Drowned Mans rapids, Montana	2,563
Arrowhead, Montana	2,577
Steamboat rock, Montana	2,581
Hole in the Wall, Montana	2,587
Citadel rock, Montana	2,590
Eagle creek, Montana	2,598
Coal banks, Montana	2,613
Fort Assinaboine landing, Montana	2,613
Mouth of Marias river, Montana	2,637
Fort Benton, Montana	2,663

YELLOWSTONE RIVER LANDINGS BETWEEN FORT BUFORD AND LITTLE BIG HORN (DISTANCES FROM FORT BUFORD).

Fort Buford, North Dakota	0
Glendive, Montana	148
Powder river, Montana	200
Tongue river, Montana	237
Fort Keogh, Montana	237
Rosebud, Montana	274
Bighorn, Montana	348
Little Bighorn, Montana	398

STATISTICS OF TRANSPORTATION ON THE RIVERS OF THE MISSISSIPPI VALLEY.

TABLE 1.—EQUIPMENT.

NUMBER, TONNAGE, AND VALUE OF ALL STEAMERS AND UNRIGGED CRAFT (OVER 5 TONS) OWNED ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	TOTAL.			STEAMERS.			UNRIGGED.		
	Number.	Tonnage.	Value.	Number.	Tonnage.	Value.	Number.	Tonnage.	Value.
Total for Mississippi valley	7,453	3,393,379.89	$15,335,005	1,114	210,771.89	$10,539,251	6,339	3,182,608.00	$4,795,754
Upper Mississippi	473	190,663.21	1,699,387	188	24,978.21	1,485,369	285	165,685.00	214,018
Saint Croix	26	11,258.35	110,000	15	1,258.35	99,000	11	10,000.00	11,000
Chippewa	1	108.00	7,000	1	108.00	7,000			
Illinois	9	1,860.25	80,200	9	1,860.25	80,200			
Missouri, Osage, and Gasconade	104	9,657.84	240,405	52	4,759.84	209,700	52	4,898.00	30,705
Total for Upper Mississippi system.	613	213,547.65	2,136,992	265	32,964.65	1,881,269	348	180,583.00	255,723
Ohio	4,868	2,440,881.62	6,957,513	380	85,035.62	4,099,177	4,488	2,355,846.00	2,858,336
Allegheny	32	3,055.84	63,400	6	715.84	53,000	26	2,340.00	10,400
Monongahela	158	22,887.15	449,700	48	6,234.15	419,600	110	16,653.00	30,100
Muskingum	79	8,370.79	53,515	7	567.79	25.050	72	7,803.00	28,465
Little Kanawha	53	4,972.18	30,000	5	228.18	18,000	48	4,744.00	12,000
Great Kanawha	893	412,366.13	645,038	21	2,386.13	123,333	872	409,980.00	521,705
Big Sandy	17	3.937.67	44,000	8	787.67	40,000	9	3,150.00	4,000
Kentucky	8	539.31	22,100	5	374.31	21,000	3	165.00	1,100
Green	5	316.68	13,500	5	316.68	13,500			
Wabash	3	297.00	10,000	3	297.00	10,000			
Cumberland	37	4,805.57	113,600	17	2,935.57	109,300	20	1,870.00	4,300
Tennessee	92	18,038.89	293,975	32	7,316.89	260,750	60	10,722.00	33,225
Total for Ohio system	6,245	2,920,468.83	8,696,341	537	107,195.83	5,192,710	5,708	2,813,273.00	3,503,631
Lower Mississippi	515	237,986.07	4,153,622	265	62,476.07	3,152,372	250	175,510.00	1,001,250
White	6	1,269.71	45,100	5	1,229.71	45,000	1	40.00	100
Arkansas	22	2,408.73	67,600	15	2,098.73	66,200	7	310.00	1,400
Yazoo	20	3,079.68	79,450	11	1,409.68	62,000	9	1,670.00	17,450
Washita	3	994.52	45,000	3	994.52	45,000			
Red	14	2,218.88	85,700	9	1,968.88	80,700	5	250.00	5,000
Total for Lower Mississippi system.	580	247,957.59	4,476,472	308	70,177.59	3,451,272	272	177,780.00	1,025,200
Red River of the North	15	11,405.82	25,200	4	433.82	14,000	11	10,972.00	11,200

TABLE 2.—EQUIPMENT BY CLASSES.

NUMBER, TONNAGE, AND VALUE OF ALL VESSELS (OVER 5 TONS), BY CLASSES, AND OWNED ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	Classes.	Number of vessels in each class.	Tonnage.	Value.
Total for Mississippi valley		7,453	3,393,379.89	$15,335,005
UPPER MISSISSIPPI SYSTEM.				
Upper Mississippi	Passenger and freight	23	5,732.91	281,700
	Towing	77	9,736.51	621,800
	Ferry	24	2,144.39	170,200
	Harbor	25	994.26	62,250
	Miscellaneous	10	1,999.75	139,800
	No traffic report	29	4,370.39	209,619
	Unrigged	285	165,685.00	214,018
Total		473	190,663.21	1,699,387
Saint Croix	Towing	10	1,129.82	88,500
	Ferry	1	26.98	3,000
	Harbor	4	101.55	7,500
	Unrigged	11	10,000.00	11,000
Total		26	11,258.35	110,000
Chippewa	Towing	1	108.00	7,000
Illinois	Passenger and freight	7	1,811.80	79,200
	Ferry	2	48.45	1,000
Total		9	1,860.25	80,200
Missouri, Osage, and Gasconade	Passenger and freight	15	2,458.85	70,300
	Towing and harbor	10	573.37	41,700
	Ferry	24	1,685.49	94,100
	Unrigged	52	4,898.00	30,705
	No traffic report	3	42.13	3,600
Total		104	9,657.84	240,405
Total for Upper Mississippi system		613	213,547.65	2,136,992
OHIO SYSTEM.				
Ohio	Passenger and freight	85	32,688.82	1,209,825
	Towing	114	26,708.08	1,680,600
	Ferry	54	10,918.00	350,250
	Harbor	48	4,275.11	301,000
	Miscellaneous	25	2,978.83	160,200
	Unrigged	4,488	2,355,846.00	2,858,336
	No traffic report	54	7,466.78	388,302
Total		4,868	2,440,881.62	6,957,513
Allegheny	Passenger and freight	6	715.84	53,000
	Unrigged	26	2,340.00	10,400
Total		32	3,055.84	63,400
Monongahela	Passenger and freight	8	1,471.48	75,700
	Towing	25	3,441.97	246,700
	Ferry	3	263.39	15,000
	Miscellaneous	12	1,057.31	82,200
	Unrigged	110	16,653.00	30,100
Total		158	22,887.15	449,700
Muskingum	Passenger and freight	4	333.35	16,750
	Towing	2	219.35	7,000
	Harbor	1	15.09	1,300
	Unrigged	72	7,803.00	28,465
Total		79	8,370.79	53,515
Little Kanawha	Passenger and freight	2	143.56	10,000
	Towing	1	34.93	4,000
	Harbor	1	25.64	3,000
	Miscellaneous	1	24.05	1,000
	Unrigged	48	4,744.00	12,000
Total		53	4,972.18	30,000

TABLE 2.—EQUIPMENT BY CLASSES—Continued.

NUMBER, TONNAGE, AND VALUE OF ALL VESSELS (OVER 5 TONS), BY CLASSES, AND OWNED ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889—Continued.

RIVERS.	Classes.	Number of vessels in each class.	Tonnage.	Value.
OHIO SYSTEM—Continued.				
Ohio—Continued.				
Great Kanawha	Passenger and freight	5	427. 55	$23, 500
	Towing	4	692. 66	39, 333
	Harbor	6	822. 49	41, 000
	Ferry	2	102. 47	8, 000
	Miscellaneous	2	58. 78	3, 500
	Unrigged	872	409, 980. 00	521, 705
	No traffic report	2	282. 18	8, 000
Total		893	412, 366. 13	645, 038
Big Sandy	Passenger and freight	5	443. 65	16, 000
	Harbor	3	344. 02	24, 000
	Unrigged	9	3, 150. 00	4, 000
Total		17	3, 937. 67	44, 000
Kentucky	Passenger and freight	3	246. 52	15, 000
	Towing	1	77. 88	4, 000
	Unrigged	3	165. 00	1, 100
	No traffic report	1	49. 91	2, 000
Total		8	539. 31	22, 100
Green	Passenger and freight	5	316. 68	13, 500
Wabash	Passenger and freight	2	243. 33	7, 500
	No traffic report	1	53. 67	2, 500
Total		3	297. 00	10, 000
Cumberland	Passenger and freight	13	2, 631. 48	100, 800
	Towing	4	304. 09	8, 500
	Unrigged	20	1, 870. 00	4, 300
Total		37	4, 805. 57	113, 600
Tennessee	Passenger and freight	23	5 851. 24	210, 500
	Towing	6	1, 183. 71	46, 250
	Ferry	2	259. 67	3, 000
	Unrigged	60	10, 722. 00	33, 225
	No traffic report	1	22. 27	1, 000
Total		92	18, 038. 89	293, 975
Total for Ohio system		6, 245	2. 920, 468. 83	8, 696, 341
LOWER MISSISSIPPI SYSTEM.				
Lower Mississippi	Passenger and freight	74	31, 898. 33	1, 186, 300
	Towing	35	9, 665. 18	627, 600
	Harbor	53	12, 403. 80	588, 300
	Ferry	45	2, 831. 74	392, 200
	Miscellaneous	11	599. 93	70, 350
	Unrigged	250	175, 510. 00	1, 001, 250
	No traffic report	47	5, 077. 09	287, 622
Total		515	237, 986. 07	4, 153, 622
White	Passenger and freight	5	1, 229. 71	45, 000
	Unrigged	1	40. 00	100
Total		6	1, 269. 71	45, 100
Arkansas	Passenger and freight	9	1, 785. 91	46, 700
	Ferry	6	312. 82	19, 500
	Unrigged	7	310. 00	1, 400
Total		22	2, 408. 73	67, 600
Yazoo	Passenger and freight	11	1, 409. 68	62, 000
	Unrigged	9	1, 670. 00	17, 450
Total		20	3, 079. 68	79, 450

TABLE 2.—EQUIPMENT BY CLASSES—Continued.

NUMBER, TONNAGE, AND VALUE OF ALL VESSELS (OVER 5 TONS), BY CLASSES, AND OWNED ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889—Continued.

RIVERS.	Classes.	Number of vessels in each class.	Tonnage.	Value.
LOWER MISSISSIPPI SYSTEM—Continued.				
Lower Mississippi—Continued.				
Washita	Passenger and freight	3	994. 52	$45, 000
Red	Passenger and freight	[illegible]	1. 968. 88	80, 700
	Unrigged	5	250. 00	5, 000
Total		14	2, 218. 88	85, 700
Total for Lower Mississippi system		580	247, 957. 59	4, 476, 472
RED RIVER OF THE NORTH.				
Red River of the North	Freight	3	411. 17	12, 500
	Unrigged	11	10, 972. 00	11, 200
	No traffic report	1	22. 65	1, 500
Total		15	11, 405. 82	25, 200

TABLE 3.—EQUIPMENT BY TONNAGE GROUPS.

NUMBER AND TONNAGE OF ALL STEAMERS (OVER 5 TONS) DOCUMENTED IN CUSTOMS DISTRICTS OF THE MISSISSIPPI VALLEY IN 1889, GIVEN BY TONNAGE GROUPS FOR EACH DISTRICT. (*a*)

CUSTOMS DISTRICTS.	TOTAL.		5 TO 50 TONS.		50 TO 100 TONS.		100 TO 200 TONS.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
Total	1,114	209,826.07	270	7,933.26	261	19,344.92	295	42,601.42
New Orleans, Louisiana	126	19,248.58	35	1,199.49	37	2,667.20	27	3,822.59
Natchez, Mississippi	4	592.35	1	44.49	1	72.71	1	186.03
Vicksburg, Mississippi	30	2,875.99	10	257.90	11	815.67	5	634.36
Memphis, Tennessee	71	12,113.76	24	645.00	16	1,144.57	12	1,808.04
Chattanooga, Tennessee	22	3,966.09	5	180.21	1	63.01	8	1,224.13
Paducah, Kentucky	53	8,781.24	17	573.29	9	643.73	11	1,518.43
Louisville, Kentucky	52	11,937.92	9	286.67	13	935.54	15	2,266.05
Saint Louis, Missouri	115	42,827.04	23	646.72	19	1,525.42	12	1,695.14
Kansas city, Missouri	16	1,781.35	4	110.01	7	547.58	4	613.33
Saint Joseph, Missouri	[illegible]	340.53	3	84.56	2	153.53	1	102.44
Omaha, Nebraska	13	1,329.55	4	70.51	6	370.62	....	....
Burlington, Iowa	43	5,059.39	10	366.43	11	786.81	18	2,881.38
Dubuque, Iowa	28	6,355.26	6	129.83	6	448.61	7	1,091.18
Minnesota (*b*)	46	5,213.56	16	409.66	6	447.47	18	2,603.01
Lacrosse, Wisconsin	47	3,884.03	16	441.95	15	1,187.58	16	2,254.50
Galena, Illinois	27	3,129.60	4	130.06	5	366.20	18	2,633.34
Evansville, Indiana	54	6,950.76	23	565.31	12	904.84	10	1,392.77
Cincinnati, Ohio	115	31,406.87	21	601.05	24	1,713.40	30	4,412.29
Wheeling, West Virginia	94	9,768.97	22	703.87	36	2,697.50	27	3,884.94
Pittsburg, Pennsylvania	152	32,263.23	17	486.25	24	1,852.93	55	7,577.47

CUSTOMS DISTRICTS.	200 TO 300 TONS.		300 TO 400 TONS.		400 TO 500 TONS.		500 TO 1,000 TONS.		1,000 TO 2,500 TONS.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
Total	92	22,746.92	74	25,481.02	28	12,528.88	71	49,025.68	23	30,163.97
New Orleans, Louisiana	12	2,918.50	7	2,485.90	2	966.07	4	3,129.85	2	2,058.98
Natchez, Mississippi	1	289.12	....	....	....	....	....	....	....	....
Vicksburg, Mississippi	2	473.91	2	694.15	....	....	....	....	....	....
Memphis, Tennessee	5	1,190.59	5	1,715.58	2	934.93	6	3,615.34	1	1,059.71
Chattanooga, Tennessee	4	912.32	3	1,021.08	....	....	1	565.34	....	....
Paducah, Kentucky	5	1,203.66	7	2,319.73	1	467.17	3	2,055.23	....	....
Louisville, Kentucky	2	491.78	7	2,417.12	1	438.17	4	3,054.25	1	2,048.34
Saint Louis, Missouri	8	2,002.36	12	4,376.21	12	5,287.10	18	11,879.81	11	15,414.28
Kansas city, Missouri	....	....	....	....	....	....	1	510.43	....	....
Saint Joseph, Missouri	....	....	....	....	....	....	....	....	....	....
Omaha, Nebraska	2	536.11	1	352.31	....	....	....	....	....	....
Burlington, Iowa	3	712.02	1	312.75	....	....	....	....	....	....
Dubuque, Iowa	3	723.95	2	673.57	1	456.96	2	1,340.05	1	1,491.11
Minnesota	3	739.88	3	1,013.54	....	....	....	....	....	....
Lacrosse, Wisconsin	....	....	....	....	....	....	....	....	....	....
Galena, Illinois	....	....	....	....	....	....	....	....	....	....
Evansville, Indiana	4	927.95	1	319.46	....	....	4	2,840.43	....	....
Cincinnati, Ohio	10	2,512.52	6	1,950.16	4	1,682.61	13	10,443.29	7	8,691.55
Wheeling, West Virginia	7	1,789.27	2	693.39	....	....	....	....	....	....
Pittsburg, Pennsylvania	21	5,322.98	15	5,136.07	5	2,295.87	15	9,591.66	....	....

a Compiled from reports furnished by commissioner of navigation.

b Comprising the ports of Saint Vincent and Saint Paul.

TABLE 4.—INCOME AND EXPENDITURE.

GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF ALL STEAMERS (OVER 5 TONS) OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889. (*a*)

RIVERS.	Gross earnings.	Expenses.	Net earnings.
Total for Mississippi valley	$16. 337, 533	$12, 600, 342	$3, 737, 191
Upper Mississippi	1, 994, 786	1, 403, 746	591, 040
Saint Croix	169, 184	93, 703	75, 481
Chippewa	18, 244	9, 844	8, 400
Illinois	135, 801	114, 047	21, 754
Missouri, Osage, and Gasconade	294, 470	229, 477	64, 993
Total for Upper Mississippi system	2, 612, 485	1, 850, 817	761, 668
Ohio	5, 070, 654	4, 000. 777	1, 069, 877
Allegheny	20, 630	18, 449	2, 181
Monongahela	496, 930	398, 861	98, 069
Muskingum	55, 482	40, 589	14, 893
Little Kanawha	30, 921	17, 343	13, 578
Great Kanawha	193, 006	139, 677	53, 329
Big Sandy	94, 918	69, 879	25, 039
Kentucky	58, 821	33, 866	24, 955
Green	31, 889	27, 154	4, 735
Wabash	42, 320	22, 140	20, 180
Cumberland	205, 636	170, 939	34, 697
Tennessee	400, 806	330, 893	69, 913
Total for Ohio system	6, 702, 013	5. 270, 567	1, 431, 446
Lower Mississippi	6, 236, 310	4, 849, 939	1, 386, 371
White	100, 697	82, 443	18, 254
Arkansas	86, 383	56. 549	29, 834
Yazoo	144, 068	125, 469	18, 599
Washita	125, 180	103, 220	21, 960
Red	324, 736	257. 092	67, 644
Total for Lower Mississippi system	7, 017, 374	5, 474, 712	1. 542, 662
Red River of the North	5, 661	4, 246	1. 415

a The expense accounts of the barges, flats, and other unrigged are included, wherever practicable, in those of the towing steamers.

TABLE 5.—INCOME AND EXPENDITURE BY CLASSES.

GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF ALL STEAMERS, BY CLASSES, (a) OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	Classes.	Number of vessels in each class.	Gross earnings.	Expenses.	Net earnings.
Total for Mississippi valley		975	$16, 337, 533	$12, 600, 342	$3, 737, 191
UPPER MISSISSIPPI SYSTEM.					
Upper Mississippi	Passenger and freight	23	463, 872	380, 375	83, 497
	Towing	77	1, 249, 850	812, 401	437, 449
	Ferry	24	131, 528	92, 078	39, 450
	Harbor	25	102, 147	71, 503	30, 644
	Miscellaneous	10	47, 389	47, 389	....
Total		159	1, 994, 786	1, 403, 746	591, 040
Saint Croix	Towing	10	154, 597	83, 481	71, 116
	Ferry	1	1, 485	1, 050	435
	Harbor	4	13, 102	9, 172	3, 930
Total		15	169, 184	93, 703	75, 481
Chippewa	Towing	1	18, 244	9, 844	8, 400
Illinois	Passenger and freight	7	133, 764	112, 321	21, 443
	Ferry	2	2, 037	1, 726	311
Total		9	135, 801	114, 047	21, 754
Missouri, Osage, and Gasconade	Passenger and freight	15	129, 620	106, 288	23, 332
	Ferry	24	102, 493	72, 772	29, 721
	Towing and harbor	10	62, 357	50, 417	11, 940
Total		49	294, 470	229, 477	64, 993
Total for Upper Mississippi system		233	2, 612, 485	1, 850, 817	761, 668
OHIO SYSTEM.					
Ohio	Passenger and freight	85	2, 168, 215	1, 850, 248	317, 967
	Towing	114	2, 168, 020	1, 657, 136	510, 884
	Ferry	54	431, 267	246, 893	184, 374
	Harbor	48	254, 934	198, 282	56, 652
	Miscellaneous	25	48, 218	48, 218	....
Total		326	5, 070, 654	4, 000, 777	1, 069, 877
Allegheny	Passenger and freight	6	20, 630	18, 449	2, 181
Monongahela	Passenger and freight	8	130, 664	107, 179	23, 485
	Towing	25	306, 810	233, 447	73, 363
	Ferry	3	11, 238	10, 017	1, 221
	Miscellaneous	12	48, 218	48, 218	....
Total		48	496, 930	398, 861	98, 069
Muskingum	Passenger and freight	4	47, 571	35, 254	12, 317
	Towing	2	7, 361	4, 915	2, 446
	Harbor	1	550	420	130
Total		7	55, 482	40, 589	14, 893
Little Kanawha	Passenger and freight	2	24, 471	12, 075	12, 396
	Towing	1	2, 000	1, 668	332
	Harbor	1	3, 450	2, 600	850
	Miscellaneous	1	1, 000	1, 000	....
Total		5	30, 921	17, 343	13, 578
Great Kanawha	Passenger and freight	5	46, 339	36, 288	10, 051
	Towing	4	47, 809	31, 938	15, 871
	Ferry	2	13, 283	6, 965	6, 318
	Harbor	6	82, 575	61, 486	21, 089
	Miscellaneous	2	3, 000	3, 000	....
Total		19	193, 006	139, 677	53, 329
Big Sandy	Passenger and freight	5	62, 075	46, 572	15, 503
	Harbor	3	32, 843	23, 307	9, 536
Total		8	94, 918	69, 879	25, 039

a The expense accounts of the barges, flats, and other unrigged are included, wherever practicable, in those of the towing steamers.

TABLE 5.—INCOME AND EXPENDITURE BY CLASSES—Continued.

GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF ALL STEAMERS, BY CLASSES, OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889—Continued.

RIVERS.	Classes.	Number of vessels in each class.	Gross earnings.	Expenses.	Net earnings.
OHIO SYSTEM—Continued.					
Ohio—Continued.					
Kentucky	Passenger and freight	3	$40,910	$23,145	$17,765
	Towing	1	17,911	10,721	7,190
Total		4	58,821	33,866	24,955
Green	Passenger and freight	5	31,889	27,154	4,735
Wabash	Passenger and freight	2	42,320	22,140	20,180
Cumberland	Passenger and freight	13	179,688	153,412	26,276
	Towing	4	25,948	17,527	8,421
Total		17	205,636	170,939	34,697
Tennessee	Passenger and freight	23	331,345	289,699	41,646
	Towing	6	37,328	28,160	9,168
	Ferry	2	32,133	13,034	19,099
Total		31	400,806	330,893	69,913
Total for Ohio system		478	6,702,013	5,270,567	1,431,446
LOWER MISSISSIPPI SYSTEM.					
Lower Mississippi	Passenger and freight	74	3,040,334	2,742,406	297,928
	Towing	35	1,938,513	1,157,068	781,445
	Ferry	45	442,169	362,431	79,738
	Harbor	53	801,479	574,219	227,260
	Miscellaneous	11	13,815	13,815	
Total		218	6,236,310	4,849,939	1,386,371
White	Passenger and freight	5	100,697	82,443	18,254
Arkansas	Passenger and freight	9	57,199	44,881	12,318
	Ferry	6	29,184	11,668	17,516
Total		15	86,383	56,549	29,834
Yazoo	Passenger and freight	11	144,068	125,469	18,599
Washita	Passenger and freight	3	125,180	103,220	21,960
Red	Passenger and freight	9	324,736	257,092	67,644
Total for Lower Mississippi system		261	7,017,374	5,474,712	1,542,662
RED RIVER OF THE NORTH.					
Total	Freight	3	5,661	4,246	1,415

TABLE 6.—EMPLOYÉS.

NUMBER OF OFFICERS AND MEN MAKING UP THE TOTALS OF THE ORDINARY CREWS OF ALL VESSELS, BY CLASSES, IN OPERATION ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889, TOGETHER WITH THE TOTAL WAGES PAID DURING THAT YEAR.

RIVERS.	Classes.	Number of vessels in each class.	Number making up totals of ordinary crews.	Total wages paid during the year.
Total for Mississippi valley.		975	15, 996	$5, 338, 862
UPPER MISSISSIPPI SYSTEM.				
Upper Mississippi	Passenger and freight	23	576	143, 333
	Towing	77	1, 239	385, 364
	Ferry	24	125	53, 505
	Harbor	25	117	37, 075
	Miscellaneous	10	111	20, 206
Total		159	2, 168	639, 483
Saint Croix	Towing	10	159	41, 601
	Ferry	1	2	700
	Harbor	4	15	5, 287
Total		15	176	47, 588
Chippewa	Towing	1	16	5, 046
Illinois	Passenger and freight	7	162	35, 661
	Ferry	2	4	1, 100
Total		9	166	36, 761
Missouri, Osage, and Gasconade.	Passenger and freight	15	243	41, 794
	Ferry	24	104	47, 352
	Towing and harbor	10	70	24, 995
Total		49	417	114, 141
Total for Upper Mississippi system.		233	2, 943	843, 019
OHIO SYSTEM.				
Ohio	Passenger and freight	85	2, 559	688, 407
	Towing	114	2, 069	910, 946
	Ferry	54	266	142, 126
	Harbor	48	462	152, 497
	Miscellaneous	25	68	23, 869
Total		326	5, 424	1, 917, 845
Allegheny	Passenger and freight	6	31	10, 670
Monongahela	Passenger and freight	8	81	45, 448
	Towing	25	287	120, 408
	Ferry	3	12	7, 485
	Miscellaneous	12	42	22, 680
Total		48	422	196, 021
Muskingum	Passenger and freight	4	67	17, 305
	Towing	2	11	3, 406
	Harbor	1	3	240
Total		7	81	20, 951
Little Kanawha	Passenger and freight	2	18	4, 682
	Towing	1	5	790
	Harbor	1	4	1, 085
	Miscellaneous	1	1	540
Total		5	28	7, 097
OHIO SYSTEM—Cont'd.				
Ohio—Continued.				
Great Kanawha	Passenger and freight	5	62	$19, 410
	Towing	4	63	16, 919
	Ferry	2	8	3, 420
	Harbor	6	72	23, 070
	Miscellaneous	2	5	2, 366
Total		19	210	65, 185
Big Sandy	Passenger and freight	5	99	30, 485
	Harbor	3	42	13, 440
Total		8	141	43, 925
Kentucky	Passenger and freight	3	66	12, 220
	Towing	1	15	4, 110
Total		4	81	16, 330
Green	Passenger and freight	5	43	5, 416
Wabash	Passenger and freight	2	50	13, 020
Cumberland	Passenger and freight	13	440	73, 345
	Towing	4	25	11, 085
Total		17	465	84, 430
Tennessee	Passenger and freight	23	609	140, 537
	Towing	6	63	13, 398
	Ferry	2	15	10, 800
Total		31	687	164, 735
Total for Ohio system.		478	7, 663	2, 545, 625
LOWER MISSISSIPPI SYSTEM.				
Lower Mississippi	Passenger and freight	74	2, 968	1, 032, 012
	Towing	35	720	249, 927
	Ferry	45	337	183, 972
	Harbor	53	301	176, 573
	Miscellaneous	11	17	12, 232
Total		218	4, 343	1, 654, 716
White	Passenger and freight	5	119	41, 997
Arkansas	Passenger and freight	9	141	27, 753
	Ferry	6	20	6, 216
Total		15	161	33, 969
Yazoo	Passenger and freight	11	255	60, 754
Washita	Passenger and freight	3	144	43, 756
Red	Passenger and freight	9	323	113, 349
Total for Lower Mississippi system.		261	5, 345	1, 948, 541
RED RIVER OF THE NORTH.				
Total	Freight	3	45	1, 677

TABLE 7.—TRAFFIC—ALL OPERATING CRAFT.

PASSENGERS CARRIED AND TONS OF FREIGHT MOVED BY ALL CRAFT AND MILES TRAVELED BY ALL STEAMERS (OVER 5 TONS) OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS AND THEIR TRIBUTARIES.	PASSENGERS CARRIED.			Freight moved, in tons.	Miles traveled by all steamers.
	Total.	Regular and excursion.	Ferry.		
Grand total for Mississippi valley	10, 858, 894	2, 384, 248	8, 474, 646	*a*29, 405, 046	7, 316, 545
Upper Mississippi	1, 478, 085	285, 676	1, 192, 409	4. 486, 421	1. 101, 990
Saint Croix	12, 304	*b*304	12, 000	846, 816	67, 990
Chippewa	4, 441	*b*4, 441	....	325, 477	12, 000
Illinois	50, 368	21, 768	28, 600	180, 264	83, 436
Missouri, Osage, and Gasconade	276, 536	26, 561	249, 975	1, 119. 362	159, 239
Total for Upper Mississippi system	1, 821, 734	338, 750	1, 482, 984	6, 958, 340	1, 424, 655
Ohio	5, 115. 806	1, 191, 732	3, 924, 074	7, 770, 565	2, 696, 020
Allegheny	5, 319	5, 319	....	365, 946	2, 040
Monongahela	261. 387	130, 537	130, 850	3, 294, 932	130, 898
Muskingum	37, 681	37, 681	....	10, 281	27, 055
Little Kanawha	9. 451	9, 451	....	115, 657	14, 740
Great Kanawha	92, 124	53, 599	38. 525	1, 145, 202	59, 680
Big Sandy	11, 000	11, 000	....	286, 483	47, 350
Kentucky	9, 550	9, 550	....	256, 950	12, 588
Green	11, 200	11, 200	....	819, 278	10, 300
Wabash	180	180	....	93, 178	12, 700
Cumberland	19, 160	19, 160	....	974, 316	144, 968
Tennessee	930, 285	27, 185	903, 100	909, 078	420, 894
Total for Ohio system	6, 503, 143	1, 506, 594	4, 996, 549	16, 041, 866	3, 579, 233
Lower Mississippi	2, 451, 315	518, 267	1, 933, 048	*a*4, 374, 761	1, 826. 254
White	4, 183	4, 183	....	86, 393	68, 786
Arkansas	64, 716	2, 651	62, 065	1, 663, 817	61, 689
Yazoo	5, 391	5, 391	....	77, 380	121, 216
Washita	1, 204	1, 204	....	93, 707	60, 828
Red	7, 208	7, 208	....	105, 145	172, 800
Total for Lower Mississippi system	2, 534, 017	538, 904	1, 995, 113	*a*6, 401, 203	2, 311, 573
Red River of the North	....	....	....	3, 637	1, 084

a Respectively, 32,993,792 tons, 7,963,507 tons, and 9,989,949 tons, including the coal and lumber which were brought into and carried on the Lower Mississippi from the Upper Mississippi and Ohio rivers. (See page 46.)

b These were excursion passengers carried on towboats.

TABLE 8.—TRAFFIC—FREIGHT CARRIED AND TOWED.

FREIGHT CARRIED BY PASSENGER AND FREIGHT STEAMERS AND ON FERRIES AND FREIGHT TOWED BY PASSENGER AND FREIGHT STEAMERS AND TOWBOATS OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	Total tons freight carried and towed.	FREIGHT CARRIED.			FREIGHT TOWED.		
		Total tons carried.	On passenger and freight steamers.	On ferry steamers.	Total tons towed.	By passenger and freight steamers.	By towboats.
Total for Mississippi valley	29, 405, 046	10, 345, 504	9, 233, 598	1, 111, 906	19, 059, 542	1, 926, 200	17, 133, 342
Upper Mississippi	4, 486, 421	1, 057, 873	518, 816	539, 057	3, 428, 548		3, 428, 548
Saint Croix	846, 816	800		800	846, 016		846, 016
Chippewa	325, 477				325, 477		325, 477
Illinois	180, 264	135, 572	135, 572		44, 692	44, 692	
Missouri, Osage, and Gasconade	1, 119, 362	957, 379	799, 344	158, 035	161, 983		161, 983
Total for Upper Mississippi system	6, 958, 340	2, 151, 624	1, 453, 732	697, 892	4, 806, 716	44, 692	4, 762, 024
Ohio	7, 770, 565	2, 559, 446	2, 314, 548	244, 898	5, 211, 119		5, 211, 119
Allegheny	365, 946	115, 696	115, 696		250, 250	250, 250	
Monongahela	3, 294, 932	151, 725	151, 725		3, 143, 207		3, 143, 207
Muskingum	10, 281	10, 281	10, 281				
Little Kanawha	115, 657	2, 968	2, 968		112, 689		112, 689
Great Kanawha	1, 145, 202	112, 838	112, 838		1, 032, 364		1, 032, 364
Big Sandy	286, 483	156, 074	156, 074		130, 409	130, 409	
Kentucky	256, 950	53, 047	53, 047		203, 903		203, 903
Green	819, 278	172, 508	172, 508		646, 770	646, 770	
Wabash	93, 178	35, 378	35, 378		57, 800	57, 800	
Cumberland	974, 316	217, 534	217, 534		756, 782		756, 782
Tennessee	909, 078	219, 170	219, 170		689, 908		689, 908
Total for Ohio system	16, 041, 866	3, 806, 665	3, 561, 767	244, 898	12, 235, 201	1, 085, 229	11, 149, 972
Lower Mississippi	4, 374, 761	3, 153, 415	2, 985, 399	168, 016	1, 221, 346		1, 221, 346
White	86, 393	22, 537	22, 537		63, 856	63, 856	
Arkansas	1, 663, 817	1, 020, 023	1, 018, 923	1, 100	643, 794	643, 794	
Yazoo	77, 380	37, 138	37, 138		40, 242	40, 242	
Washita	93, 707	64, 597	64, 597		29, 110	29, 110	
Red	105, 145	89, 505	89, 505		15, 640	15, 640	
Total for Lower Mississippi system	6, 401, 203	4, 387, 215	4, 218, 099	169, 116	2, 013, 988	792, 642	1, 221, 346
Red River of the North	3, 637				3, 637	3, 637	

TABLE 9.—FREIGHT TRAFFIC BY COMMODITIES.

PRINCIPAL COMMODITIES OF THE FREIGHT, IN TONS, CARRIED ON PASSENGER AND FREIGHT STEAMERS (OVER 5 TONS) OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	Total.	PRODUCTS OF AGRICULTURE.								PRODUCTS OF MINES.				
		Wheat.	Corn.	Other grain.	Mill products.	Cotton.	Tobacco.	Fruit and vegetables.	Hay.	Bituminous coal.	Iron ore.	Other ore.	Stone and gravel.	Clay and sand.
Total Mississippi valley	9, 233, 598	836, 386	311, 598	88, 949	89, 992	808, 135	27, 707	41, 748	33, 944	313	894	450	21, 932	959
Upper Mississippi	518, 816	23, 000			630									
Illinois	135, 572	18, 000			747					300				
Missouri, Osage, and Gasconade.	799, 344	136, 000	50, 000		9, 275									
Total Upper Mississippi system.	1, 453, 732	177, 000	50, 000		10, 652					300				
Ohio	2, 314, 548	124, 405			620	9, 412					894			
Allegheny	115, 696							21	890					
Monongahela	151, 725													
Muskingum	10, 281	1, 693												
Little Kanawha	2, 968													
Great Kanawha	112, 838				2, 577									
Big Sandy	156, 074		423					2, 511						
Kentucky	53, 047			5, 949	1, 503		2, 783		4, 407					
Green	172, 508			1, 431	773		4, 723	501	319					
Wabash	35. 378	1, 811	15, 849	99									1. 754	
Cumberland	217, 534			20, 983	3, 628		10, 201		895					
Tennessee	219, 170	5, 477	17. 984	5, 351	2, 267	10, 138	10, 000	18, 657	2, 440	13			20. 178	959
Total Ohio system	3, 561, 767	133, 386	34, 256	33, 813	11, 368	19, 550	27, 707	21, 690	8, 951	13	894		21, 932	959
Lower Mississippi	2. 985, 399	420, 000	77, 543	33, 332	9, 462	716, 503			504					
White	22, 537					7, 403						450		
Arkansas	1, 018, 923	100, 000	110, 282	21, 804	57, 655	35, 003		20, 058	24, 489					
Yazoo	37, 138		22, 865											
Washita	64, 597		16, 652											
Red	89, 505	6, 000			855	29, 676								
Total Lower Mississippi system.	4, 218, 099	526, 000	227, 342	55, 136	67, 972	788, 585		20, 058	24, 993			450		

RIVERS.	OTHER PRODUCTS.			MANUFACTURES.								Merchandise, etc.
	Ice.	Lumber and forest products.	Animal products.	Petroleum and other oils.	Sugar.	Iron, pig and bloom.	Other iron manufactures.	Bar and sheet metal.	Cement, brick, and lime.	All other manufactures.	Cotton seed and oil.	
Total Mississippi valley	10	547, 545	170, 518	3, 534	90, 844	5, 275	92, 110	112	1, 265	48, 536	388, 684	5, 622, 158
Upper Mississippi			2, 356									492, 830
Illinois			2, 094									114, 431
Missouri. Osage, and Gasconade.			6, 175									597, 894
Total Upper Mississippi system.			10, 625									1, 205, 155
Ohio					57, 881		54, 297			29, 113		2, 037, 926
Allegheny		97, 360		2, 450			300			2, 025		12, 650
Monongahela		30, 806	1, 407				2, 177					117, 335
Muskingum		475										8, 113
Little Kanawha				678								2, 290
Great Kanawha									213			110. 048
Big Sandy		12, 541	676							34		139, 889
Kentucky		9, 547	2, 350				1, 903			5, 051		19, 554
Green		152, 541	501				98		90	2, 598		8, 933
Wabash		9, 500								271		6, 094
Cumberland		146, 398	5, 623			3, 006				5, 028		21, 772
Tennessee	10	44, 732	1, 048	406	1, 015	2, 269	50	112	962	4, 416	1, 800	68, 886
Total Ohio system	10	503, 900	11, 605	3, 534	58, 896	5, 275	58, 825	112	1, 265	48, 536	1, 800	2, 553, 490
Lower Mississippi					30, 828						271, 809	1. 425, 418
White											2, 338	12, 346
Arkansas		40, 784	148, 125				33, 285				85, 784	341, 654
Yazoo		2, 861	65								8, 020	3, 327
Washita			98								5, 058	42, 789
Red					1, 120						13, 875	37, 979
Total Lower Mississippi system.		43, 645	148, 288		31, 948		33, 285				386, 884	1, 863, 513

TABLE 10.—FREIGHT TRAFFIC (IN TONS), BY COMMODITIES, ON UNRIGGED CRAFT.

RIVERS.	Total.	PRODUCTS OF AGRICULTURE.						PRODUCTS OF MINES.			
		Wheat.	Corn.	Other grain.	Mill products.	Cotton.	Hay.	Bituminous coal.	Iron ore.	Stone and gravel.	Clay and sand.
Total for Mississippi valley	19,059,542	3,595	471,203	3,767	580	87,607	57,635	8,527,115	573,896	156,699	141,464
Upper Mississippi	3,428,548							10,624			
Saint Croix	846,016										
Chippewa	325,477										
Illinois	44,692							2,000			
Missouri, Osage, and Gasconade	161,983						5,000	51,162	1,500		
Total for Upper Mississippi system	4,806,716						5,000	63,786	1,500		
Ohio	5,211,119	595				9,110	635	4,018,787	10,762		
Allegheny	250,250									19,050	51,500
Monongahela	3,143,207							3,059,418	33,386		
Little Kanawha	112,689							1,100			
Great Kanawha	1,032,364							941,446			
Big Sandy	130,409										
Kentucky	203,903			1,042						12,861	
Green	646,770							45,904		788	
Wabash	57,800									4,000	
Cumberland	756,782										89,964
Tennessee	689,908					2,404	5,000	35,875	528,248		
Total for Ohio system	12,235,201	595		1,042		11,514	5,635	8,102,530	572,396	36,699	141,464
Lower Mississippi	1,221,346		421,203	2,725		66,955	5,000	183,848			
White	63,856										
Arkansas	643,794		50,000				42,000	165,888		120,000	
Yazoo	40,242					9,138					
Washita	29,110										
Red	15,640							11,063			
Total for Lower Mississippi system	2,013,988		471,203	2,725		76,093	47,000	360,799		120,000	
Red River of the North	3,637	3,000			580						

RIVERS.	OTHER PRODUCTS.		MANUFACTURES.					Merchandise, etc.
	Ice.	Lumber and forest products.	Sugar.	Iron (pig and bloom).	Cement, brick, and lime.	All other manufactures.	Cotton seed and oil.	
Total for Mississippi valley	91,000	8,652,696	100,000	2,500	928	26,050	6,104	156,703
Upper Mississippi	45,050	3,372,874						
Saint Croix		846,016						
Chippewa		325,477						
Illinois	41,950	742						
Missouri, Osage, and Gasconade		104,321						
Total for Upper Mississippi system	87,000	4,649,430						
Ohio		1,131,755				26,050		13,425
Allegheny		179,500			200			
Monongahela		50,403						
Little Kanawha		109,079						2,510
Great Kanawha		80,468			650			9,800
Big Sandy		130,409						
Kentucky		190,000						
Green		600,000			78			
Wabash		53,800						
Cumberland		664,318		2,500				
Tennessee		118,381						
Total for Ohio system		3,308,113		2,500	928	26,050		25,735
Lower Mississippi		310,654	100,000					130,961
White		63,856						
Arkansas	4,000	261,906						
Yazoo		25,000					6,104	
Washita		29,110						
Red		4,577						
Total for Lower Mississippi system	4,000	695,103	100,000				6,104	130,961
Red River of the North		50						7

TABLE 11.—FREIGHT TRAFFIC BY COMMODITIES.

PRINCIPAL COMMODITIES OF THE FREIGHT, IN TONS, MOVED BY FERRYBOATS (OVER 5 TONS) OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	Total.	PRODUCTS OF AGRICULTURE.						
		Wheat.	Corn.	Other grain.	Mill products.	Cotton.	Tobacco.	Fruit and vegetables.
Total Mississippi valley	1, 111, 906	8, 461	4, 087	2, 872	323	550	252	17, 862
Upper Mississippi	539, 057		1, 000	2, 870				700
Saint Croix	800							
Missouri, Osage, and Gasconade	158, 035	5, 658	502		323		252	62
Total Upper Mississippi system	697, 892	5, 658	1, 502	2, 870	323		252	762
Ohio	244, 898	3	2, 585	2				
Lower Mississippi	168, 016	2, 800				550		16, 000
Arkansas	1, 100							1, 100
Total Lower Mississippi system	169, 116	2, 800				550		17, 100

RIVERS.	Bituminous coal.	OTHER PRODUCTS.		MANUFACTURES.					Merchandise, etc.
		Lumber.	Animal products.	Petroleum and other oils.	Sugar.	Bar and sheet metal.	Cement, brick, and lime.	All other manufactures.	
Total Mississippi valley	11, 801	100, 400	6, 858	4	29	1	182	10	958, 214
Upper Mississippi	11, 800	100, 315	1, 144				160	10	421, 058
Saint Croix									800
Missouri, Osage, and Gasconade		63	5, 249	4	29		18		145, 875
Total Upper Mississippi system	11, 800	100, 378	6, 393	4	29		178	10	567, 733
Ohio	1	22	165			1	4		242, 115
Lower Mississippi			300						148, 366
Arkansas									
Total Lower Mississippi system			300						148, 366

TABLE 12.—FREIGHT TRAFFIC BY COMMODITIES.

PRINCIPAL COMMODITIES OF THE TOTAL FREIGHT, IN TONS, MOVED BY FREIGHT AND PASSENGER STEAMERS, FERRYBOATS, AND UNRIGGED CRAFT (OVER 5 TONS) OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	Total.	PRODUCTS OF AGRICULTURE.								PRODUCTS OF MINES.				
		Wheat.	Corn.	Other grain.	Mill products.	Cotton.	Tobacco.	Fruit and vegetables.	Hay.	Bituminous coal.	Iron ore.	Other ore.	Stone and gravel.	Clay and sand.
Total Mississippi valley	29, 405, 046	848, 442	786, 888	95, 588	90, 895	896, 292	27, 959	59, 610	91, 579	8, 539, 229	574, 790	450	178, 631	142, 423
Upper Mississippi	4, 486, 421	23, 000	1, 000	2, 870	630			700		22, 424				
Saint Croix	846, 816													
Chippewa	325, 477													
Illinois	180, 264	18, 000			747					2, 300				
Missouri, Osage, and Gasconade	1, 119, 362	141, 658	50, 502		9, 598		252	62	5, 000	51, 162	1, 500			
Total for Upper Mississippi system.	6, 958, 340	182, 658	51, 502	2, 870	10, 975		252	762	5, 000	75, 886	1, 500			
Ohio	7, 770, 565	125, 003	2, 585	2	620	18, 522			635	4, 018, 788	11, 656			
Allegheny	365, 946							21	890				19, 050	51, 500
Monongahela	3, 294, 932									3, 059, 418	33, 386			
Muskingum	10, 281	1, 693												
Little Kanawha	115, 657									1, 100				
Great Kanawha	1, 145, 202				2, 577					941, 446				
Big Sandy	286, 483		423					2, 511						
Kentucky	256, 950			6, 991	1, 503		2, 783		4, 407				12, 861	
Green	819, 278			1, 431	773		4, 723	501	319	45, 904			788	
Wabash	93, 178	1, 811	15, 849	99									5, 754	
Cumberland	974, 316			20, 983	3, 628		10, 201		895					89, 964
Tennessee	909, 078	5, 477	17, 984	5, 351	2, 267	12, 542	10, 000	18, 657	7, 440	35, 888	528, 248		20, 178	959
Total for Ohio system	16, 041, 866	133, 984	36, 841	34, 857	11, 368	31, 064	27, 707	21, 690	14, 586	8, 102, 544	573, 290		58, 631	142, 423
Lower Mississippi	4, 374, 761	422, 800	498, 746	36, 057	9, 462	784, 008		16, 000	5, 504	183, 848				
White	86, 393					7, 403						450		
Arkansas	1, 663, 817	100, 000	160, 282	21, 804	57, 655	35, 003		21, 158	66, 489	165, 888			120, 000	
Yazoo	77, 380		22, 865			9, 138								
Washita	93, 707		16, 652											
Red	105, 145	6, 000			855	29, 676				11, 063				
Total for Lower Mississippi system.	6, 401, 203	528, 800	698, 545	57, 861	67, 972	865, 228		37, 158	71, 993	360, 799		450	120, 000	
Red River of the North	3, 637	3, 000			580									

STATEMENT OF FREIGHT CARRIED AND TOWED ON THE LOWER MISSISSIPPI, INCLUDING COAL AND LUMBER FROM UPPER MISSISSIPPI AND OHIO RIVER SYSTEMS. (*a*)

Lower Mississippi	7, 963, 507	422. 800	498, 746	36, 057	9, 462	784, 008		16, 000	5, 504	2, 288, 529				
Total Lower Mississippi system	9, 989, 949	528, 800	698, 545	57, 861	67, 972	865, 228		37, 158	71, 993	2, 465, 480		450	120, 000	
Total Mississippi valley	32, 993, 792	848. 442	786, 888	95, 588	90, 895	896. 292	27, 959	59, 610	91, 579	10, 643, 910	574, 790	450	178, 631	142, 423

a See page 15.

TABLE 12.—FREIGHT TRAFFIC BY COMMODITIES—Continued.

PRINCIPAL COMMODITIES OF THE TOTAL FREIGHT, IN TONS, MOVED BY FREIGHT AND PASSENGER STEAMERS, FERRYBOATS, AND UNRIGGED CRAFT (OVER 5 TONS) OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889—Continued.

RIVERS.	OTHER PRODUCTS.			MANUFACTURES.								Merchandise, etc.
	Ice.	Lumber and forest products.	Animal products.	Petroleum and other oils.	Sugar.	Iron (pig and bloom).	Other iron manufactures.	Bar and sheet metal.	Cement, brick, and lime.	All other manufactures.	Cotton seed and cotton-seed oil.	
Total Mississippi valley	91,010	9,300,641	177,376	3,538	190,873	7,775	92,110	113	2,375	74,596	394,788	6,737,075
Upper Mississippi	45,050	3,473,189	3,500						160	10		913,888
Saint Croix		846,016										800
Chippewa		325,477										
Illinois	41,950	742	2,094									114,431
Missouri, Osage, and Gasconade		104,384	11,424	4	29				18			743,769
Total	87,000	4,749,808	17,018	4	29				178	10		1,772,888
Ohio		1,131,777	165		57,881		54,297	1	4	55,163		2,293,466
Allegheny		276,860		2,450			300		200	2,025		12,650
Monongahela		81,209	1,407				2,177					117,335
Muskingum		475										8,113
Little Kanawha		109,079		678								4,800
Great Kanawha		80,468							863			119,848
Big Sandy		142,950	676							34		139,889
Kentucky		199,547	2,350				1,903			5,051		19,554
Green		752,541	501				98		168	2,598		8,933
Wabash		63,300								271		6,094
Cumberland		810,716	5,623			5,506				5,028		21,772
Tennessee	10	163,113	1,048	406	1,015	2,269	50	112	962	4,416	1,800	68,886
Total	10	3,812,035	11,770	3,534	58,896	7,775	58,825	113	2,197	74,586	1,800	2,821,340
Lower Mississippi		310,654	300		130,828						271,809	1,704,745
White		63,856									2,338	12,346
Arkansas	4,000	302,690	148,125				33,285				85,784	341,654
Yazoo		27,861	65								14,124	3,327
Washita		29,110	98								5,058	42,789
Red		4,577			1,120						13,875	37,979
Total	4,000	738,748	148,588		131,948		33,285				392,988	2,142,840
Red River of the North		50										7

STATEMENT OF FREIGHT CARRIED AND TOWED ON THE LOWER MISSISSIPPI, INCLUDING COAL AND LUMBER FROM UPPER MISSISSIPPI AND OHIO RIVER SYSTEMS—Continued.

Lower Mississippi		1,794,719	300		130,828						271,809	1,704,745
Total Lower Mississippi system	4,000	2,222,813	148,588		131,948		33,285				392,988	2,142,840
Total Mississippi valley	91,010	10,784,706	177,376	3,538	190,873	7,775	92,110	113	2,375	74,596	394,788	6,737,075

TABLE 13.—GENERAL ACCOUNT—PASSENGER AND FREIGHT STEAMERS.

NUMBER, TONNAGE, VALUE, OPERATIONS, FINANCIAL ACCOUNT, AND EMPLOYÉS, WITH WAGES PAID, OF PASSENGER AND FREIGHT STEAMERS (OVER 5 TONS) OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	EQUIPMENT.			TRAFFIC.		INCOME AND EXPENDITURE.			EMPLOYÉS. (a)	
	Number.	Tonnage.	Value.	Tons of freight moved.	Passengers carried.	Gross earnings.	Expenses.	Net earnings.	Men employed.	Total wages paid.
Total for Mississippi valley	320	95, 215. 26	$3, 661, 475	11, 159, 798 9, 233, 598 [b]1, 926, 200	2, 384, 248	$7, 651, 248	$6, 580, 356	$1, 070, 892	9, 101	$2, 603, 031
Upper Mississippi	23	5, 732. 91	281, 700	518. 816	285, 676	463, 872	380, 375	83, 497	576	143, 333
Saint Croix					[c]304					
Chippewa					[c]4, 441					
Illinois	7	1. 811. 80	79, 200	135, 572 [b]44, 692	21, 768	133, 764	112, 321	21, 443	162	35, 661
Missouri, Osage, and Gasconade	15	2, 458. 85	70, 300	799, 344	26, 561	129, 620	106, 288	23, 332	243	41. 794
Total for Upper Mississippi system.	45	10, 003. 56	431, 200	1, 498, 424 1. 453, 732 [b]44, 692	338, 750	727, 256	598, 984	128, 272	981	220. 788
Ohio	85	32, 688. 82	1. 209, 825	2. 314, 548	1, 191, 732	2, 168, 215	1, 850. 248	317, 967	2, 559	688, 407
Allegheny	6	715. 84	53, 000	115, 696 [b]250, 250	5, 319	20, 630	18, 449	2, 181	31	10, 670
Monongahela	8	1. 471. 48	75, 700	151, 725	130, 537	130, 664	107, 179	23, 485	81	45, 448
Muskingum	4	333. 35	16, 750	10. 281	37, 681	47, 571	35, 254	12, 317	67	17, 305
Little Kanawha	2	143. 56	10, 000	2, 968	9, 451	24, 471	12, 075	12, 396	18	4, 682
Great Kanawha	5	427. 55	23, 500	112, 838	53, 599	46, 339	36, 288	10, 051	62	19, 410
Big Sandy	5	443. 65	16, 000	156, 074 [b]130, 409	11, 000	62, 075	46, 572	15, 503	99	30, 485
Kentucky	3	246. 52	15, 000	53, 047	9, 550	40, 910	23. 145	17, 765	66	12, 220
Green	5	316. 68	13, 500	172, 508 [b]646, 770	11, 200	31, 889	27, 154	4, 735	43	5, 416
Wabash	2	243. 33	7, 500	35, 378 [b]57, 800	180	42. 320	22, 140	20, 180	50	13, 020
Cumberland	13	2, 631. 48	100, 800	217, 534	19, 160	179, 688	153, 412	26, 276	440	73, 345
Tennessee	23	5, 851. 24	210, 500	219, 170	27, 185	331, 345	289, 699	41, 646	609	140, 537
Total for Ohio system	161	45. 513. 50	1, 752, 075	4, 646, 996 3, 561, 767 [b]1, 085, 229	1, 506, 594	3, 126, 117	2, 621, 615	504, 502	4. 125	1, 060, 945
Lower Mississippi	74	31, 898. 33	1. 186, 300	2, 985, 399	518, 267	3, 040, 334	2, 742, 406	297, 928	2, 968	1, 032, 012
White	5	1, 229. 71	45, 000	22, 537 [b]63, 856	4, 183	100, 697	82, 443	18, 254	119	41, 997
Arkansas	9	1, 785. 91	46, 700	1, 018, 923 [b]643, 794	2, 651	57, 199	44, 881	12, 318	141	27, 753
Yazoo	11	1, 409. 68	62, 000	37, 138 [b]40, 242	5, 391	144, 068	125, 469	18, 599	255	60, 754
Washita	3	994. 52	45, 000	64, 597 [b]29, 110	1, 204	125, 180	103, 220	21, 960	144	43, 756
Red	9	1, 968. 88	80, 700	89, 505 [b]15, 640	7, 208	324, 736	257, 092	67, 644	323	113, 349
Total for Lower Mississippi system.	111	39, 287. 03	1, 465, 700	5, 010, 741 4, 218, 099 [b]792, 642	538, 904	3, 792, 214	3, 355, 511	436, 703	3, 950	1, 319, 621
Red River of the North	3	411. 17	12, 500	[b]3, 637	....	5, 661	4, 246	1, 415	45	1, 677

[a] See page 13.

[b] Towed by passenger and freight steamers.

[c] These were excursion passengers carried on towboats.

TABLE 14.—GENERAL ACCOUNT—TOWBOATS.

NUMBER, TONNAGE, VALUE, OPERATIONS, FINANCIAL ACCOUNT, AND EMPLOYÉS, WITH WAGES PAID, OF TOWING STEAMERS (OVER 5 TONS) OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	EQUIPMENT.			Tons of freight moved.	INCOME AND EXPENDITURE.			EMPLOYÉS. (a)	
	Number.	Tonnage.	Value.		Gross earnings.	Expenses.	Net earnings.	Men employed.	Total wages paid.
Total for Mississippi valley	290	53, 875. 55	$3, 422, 983	17, 133, 342	$6, 036, 748	$4, 098, 723	$1, 938, 025	4, 742	$1, 787, 995
Upper Mississippi	77	9, 736. 51	621, 800	3, 428, 548	1, 249, 850	812, 401	437, 449	1, 239	385, 364
Saint Croix	10	1, 129. 82	88, 500	846, 016	154, 597	83, 481	71, 116	159	41, 601
Chippewa	1	108. 00	7, 000	325, 477	18, 244	9, 844	8, 400	16	5, 046
Illinois									
Missouri, Osage, and Gasconade	10	573. 37	41, 700	161, 983	62, 357	50. 417	11, 940	70	24, 995
Total for Upper Mississippi system	98	11, 547. 70	759, 000	4, 762, 024	1, 485, 048	956, 143	528, 905	1, 484	457, 006
Ohio	114	26, 708. 08	1, 680, 600	5, 211, 119	2, 168, 020	1, 657, 136	510, 884	2, 069	910, 946
Allegheny									
Monongahela	25	3, 441. 97	246, 700	3, 143, 207	306, 810	233, 447	73, 363	287	120, 408
Muskingum	2	219. 35	7, 000	(b)	7, 361	4, 915	2, 446	11	3, 406
Little Kanawha	1	34. 93	4, 000	112, 689	2, 000	1, 668	332	5	790
Great Kanawha	4	692. 66	39, 333	1. 032, 364	47, 809	31, 938	15, 871	63	16, 919
Big Sandy									
Kentucky	1	77. 88	4, 000	203, 903	17, 911	10, 721	7, 190	15	4, 110
Green									
Wabash									
Cumberland	4	304. 09	8. 500	756, 782	25, 948	17, 527	8, 421	25	11, 085
Tennessee	6	1, 183. 71	46, 250	689, 908	37, 328	28, 160	9, 168	63	13. 398
Total for Ohio system	157	32, 662. 67	2, 036, 383	11. 149, 972	2, 613, 187	1, 985, 512	627, 675	2, 538	1, 081, 062
Lower Mississippi	35	9, 665. 18	627. 600	1, 221, 346	1, 938, 513	1, 157, 068	781, 445	720	249, 927
White									
Arkansas									
Yazoo									
Washita									
Red									
Total for Lower Mississippi system	35	9, 665. 18	627, 600	1, 221, 346	1, 938, 513	1, 157, 068	781, 445	720	249, 927
Red River of the North									

a See page 13.

b Chartered to the United States government in 1889.

TABLE 15.—GENERAL ACCOUNT—FERRYBOATS.

NUMBER, TONNAGE, VALUE, OPERATIONS, FINANCIAL ACCOUNT, AND EMPLOYÉS, WITH WAGES PAID, OF FERRY STEAMERS (OVER 5 TONS) OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	EQUIPMENT.			TRAFFIC.		INCOME AND EXPENDITURE.			EMPLOYÉS. (a)	
	Number.	Tonnage.	Value.	Tons of freight moved.	Passengers carried.	Gross earnings.	Expenses.	Net earnings.	Men employed.	Total wages paid.
Total for Mississippi valley	163	18, 593. 40	$1, 056, 250	1, 111, 906	8, 474, 646	$1, 196, 817	$818, 634	$378, 183	893	$456, 676
Upper Mississippi	24	2, 144. 39	170, 200	539, 057	1, 192, 409	131, 528	92, 078	39, 450	125	53, 505
Saint Croix	1	26. 98	3, 000	800	12, 000	1, 485	1, 050	435	2	700
Chippewa	...	...	...	...	...	...	...	...	...	...
Illinois	2	48. 45	1, 000	...	28, 600	2, 037	1, 726	311	4	1, 100
Missouri, Osage, and Gasconade	24	1, 685. 49	94, 100	158, 035	249, 975	102, 493	72, 772	29, 721	104	47, 352
Total for Upper Mississippi system	51	3, 905. 31	268, 300	697, 892	1, 482, 984	237, 543	167, 626	69, 917	235	102, 657
Ohio	54	10, 918. 00	350, 250	244, 898	3, 924, 074	431, 267	246, 893	184, 374	266	142, 126
Allegheny	...	...	...	...	...	...	...	...	...	...
Monongahela	3	263. 39	15, 000	...	130, 850	11, 238	10, 017	1, 221	12	7, 485
Muskingum	...	...	...	...	...	...	...	...	...	...
Little Kanawha	...	...	...	...	...	...	...	...	...	...
Great Kanawha	2	102. 47	8, 000	...	38, 525	13, 283	6, 965	6, 318	8	3, 420
Big Sandy	...	...	...	...	...	...	...	...	...	...
Kentucky	...	...	...	...	...	...	...	...	...	...
Green	...	...	...	...	...	...	...	...	...	...
Wabash	...	...	...	...	...	...	...	...	...	...
Cumberland	...	...	...	...	...	...	...	...	...	...
Tennessee	2	259. 67	3, 000	...	903, 100	32, 133	13, 034	19, 099	15	10, 800
Total for Ohio system	61	11, 543. 53	376, 250	244, 898	4, 996, 549	487, 921	276, 909	211, 012	301	163, 831
Lower Mississippi	45	2, 831. 74	392, 200	168, 016	1, 933, 048	442, 169	362, 431	79, 738	337	183, 972
White	...	...	...	...	...	...	...	...	...	...
Arkansas	6	312. 82	19, 500	1, 100	62, 065	29, 184	11, 668	17, 516	20	6, 216
Yazoo	...	...	...	...	...	...	...	...	...	...
Washita	...	...	...	...	...	...	...	...	...	...
Red	...	...	...	...	...	...	...	...	...	...
Total for Lower Mississippi system	51	3, 144. 56	411, 700	169, 116	1, 995, 113	471, 353	374, 099	97, 254	357	190, 188
Red River of the North	...	...	...	...	...	...	...	...	...	...

[a] See page 13.

TABLE 16.—GENERAL ACCOUNT—HARBOR BOATS.

NUMBER, TONNAGE, VALUE, FINANCIAL ACCOUNT, AND EMPLOYÉS, WITH WAGES PAID, OF HARBOR BOATS OPERATING IN THE PORTS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	EQUIPMENT.			INCOME AND EXPENDITURE.			EMPLOYÉS. (a)	
	Number.	Tonnage.	Value.	Gross earnings.	Expenses.	Net earnings.	Men employed.	Total wages paid.
Total for Mississippi valley	141	18,981.96	$1,028,350	$1,291,080	$940,989	$350,091	1,016	$409,267
Upper Mississippi	25	994.26	62,250	102,147	71,503	30,644	117	37,075
Saint Croix	4	101.55	7,500	13,102	9,172	3,930	15	5,287
Chippewa								
Illinois								
Missouri, Osage, and Gasconade								
Total for Upper Mississippi system	29	1,095.81	69,750	115,249	80,675	34,574	132	42,362
Ohio	48	4,275.11	301,000	254,934	198,282	56,652	462	152,497
Allegheny								
Monongahela								
Muskingum	1	15.09	1,300	550	420	130	3	240
Little Kanawha	1	25.64	3,000	3,450	2,600	850	4	1,085
Great Kanawha	6	822.49	41,000	82,575	61,486	21,089	72	23,070
Big Sandy	3	344.02	24,000	32,845	23,307	9,536	42	13,440
Kentucky								
Green								
Wabash								
Cumberland								
Tennessee								
Total for Ohio system	59	5,482.35	370,300	374,352	286,095	88,257	583	190,332
Lower Mississippi	53	12,403.80	588,300	801,479	574,219	227,260	301	176,573
White								
Arkansas								
Yazoo								
Washita								
Red								
Total for Lower Mississippi system	53	12,403.80	588,300	801,479	574,219	227,260	301	176,573
Red River of the North								

a See page 13.

TABLE 17.—GENERAL ACCOUNT—MISCELLANEOUS CRAFT.

NUMBER, TONNAGE, VALUE, FINANCIAL ACCOUNT, AND EMPLOYÉS, WITH WAGES PAID, OF MISCELLANEOUS CRAFT OPERATING IN THE PORTS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	EQUIPMENT.			INCOME AND EXPENDITURE.			EMPLOYÉS. (a)	
	Number.	Tonnage.	Value.	Gross earnings.	Expenses.	Net earnings.	Men employed.	Total wages paid.
Total for Mississippi valley	61	6, 718. 65	$466, 050	$161, 640	$161, 640		244	$81, 893
Upper Mississippi	10	1, 999. 75	139, 800	47, 389	47, 389		111	20, 206
Saint Croix								
Chippewa								
Illinois								
Missouri, Osage, and Gasconade								
Total for Upper Mississippi system	10	1, 999. 75	139, 800	47, 389	47, 389		111	20, 206
Ohio	25	2, 978. 83	169, 200	48, 218	48, 218		68	23, 869
Allegheny								
Monongahela	12	1, 057. 31	82, 200	48, 218	48, 218		42	22, 680
Muskingum								
Little Kanawha	1	24. 05	1, 000	1, 000	1, 000		1	540
Great Kanawha	2	58. 78	3, 500	3, 000	3, 000		5	2, 366
Big Sandy								
Kentucky								
Green								
Wabash								
Cumberland								
Tennessee								
Total for Ohio system	40	4, 118. 97	255, 900	100, 436	100, 436		116	49, 455
Lower Mississippi	11	599. 93	70, 350	13, 815	13, 815		17	12, 232
White								
Arkansas								
Yazoo								
Washita								
Red								
Total for Lower Mississippi system	11	599. 93	70, 350	13, 815	13, 815		17	12, 232
Red River of the North								

a See page 13.

TABLE 18.—GENERAL ACCOUNT—NO TRAFFIC REPORT.

NUMBER, TONNAGE, AND VALUE OF ALL CRAFT (OVER 5 TONS) OWNED IN THE PORTS OF THE MISSISSIPPI VALLEY, FOR WHICH NO TRAFFIC REPORT WAS RECEIVED FOR 1889.

RIVERS.	EQUIPMENT.		
	Number.	Tonnage.	Value.
Total for Mississippi valley	139	17, 387. 07	$904, 143
Upper Mississippi	29	4, 370. 39	209, 619
Saint Croix			
Chippewa			
Illinois			
Missouri, Osage, and Gasconade	3	42. 13	3, 600
Total for Upper Mississippi system	32	4, 412. 52	213, 219
Ohio	54	7, 466. 78	388, 302
Allegheny			
Monongahela			
Muskingum			
Little Kanawha			
Great Kanawha	2	282. 18	8, 000
Big Sandy			
Kentucky	1	49. 91	2. 000
Ohio—Continued.			
Green			
Wabash	1	53. 67	$2, 500
Cumberland			
Tennessee	1	22. 27	1, 000
Total for Ohio system	59	7, 874. 81	401, 802
Lower Mississippi	47	5, 077. 09	287, 622
White			
Arkansas			
Yazoo			
Washita			
Red			
Total for Lower Mississippi system	47	5, 077. 09	287, 622
Red River of the North	1	22. 65	1, 500

TABLE 19.—GENERAL ACCOUNT—RÉSUMÉ.

NUMBER, TONNAGE, VALUE, OPERATIONS, FINANCIAL ACCOUNT, EMPLOYÉS, AND WAGES PAID OF ALL STEAMERS REGISTERED IN THE PORTS OF THE RIVERS OF THE MISSISSIPPI VALLEY IN 1889.

RIVERS.	EQUIPMENT.			TRAFFIC.			INCOME AND EXPENDITURE.			EMPLOYÉS. (*a*)	
	Number.	Tonnage.	Value.	Miles traveled.	Freight moved. (Tons.)	Passengers carried.	Gross earnings.	Expenses.	Net earnings.	Number making up ordinary crews.	Total wages paid during year.
Total for Mississippi valley.	1, 114	210, 771. 89	$10, 539, 251	7, 316, 545	29, 405, 046	10, 858, 894	$16, 337, 533	$12, 600, 342	$3, 737, 191	15, 996	$5, 338, 862
Upper Mississippi:											
Passenger and freight	23	5, 732. 91	281, 700	....	518, 816	285, 676	463, 872	380, 375	83, 497	576	143, 333
Towboats	77	9, 736. 51	621, 800	....	3, 428, 548	....	1, 249, 850	812, 401	437, 449	1, 239	385, 364
Ferryboats	24	2, 144. 39	170, 200	....	539, 057	1, 192, 409	131, 528.	92, 078	39, 450	125	53, 505
Harbor boats	25	994. 26	62, 250	....	....	....	102, 147	71, 503	30, 644	117	37, 075
Miscellaneous	10	1, 999. 75	139, 800	....	....	....	47, 389	47, 389	....	111	20, 206
No traffic reported	29	4, 370. 39	209, 619	....	....	....	....	....	....	....	....
Total	188	24, 978. 21	1, 485, 369	1, 101, 990	4, 486, 421	1, 478, 085	1, 994, 786	1, 403, 746	591, 040	2, 168	639, 483
Saint Croix:											
Towboats	10	1, 129. 82	88, 500	....	846, 016	304	154, 597	83, 481	71, 116	159	41, 601
Ferryboats	1	26. 98	3, 000	....	800	12, 000	1, 485	1, 050	435	2	700
Harbor boats	4	101. 55	7, 500	....	....	....	13, 102	9, 172	3, 930	15	5, 287
Total	15	1, 258. 35	99, 000	67, 990	846, 816	12, 304	169, 184	93, 703	75. 481	176	47, 588
Chippewa:											
Towboats	1	108. 00	7, 000	12, 000	325, 477	4, 441	18, 244	9, 844	8, 400	16	5, 046
Illinois:											
Passenger and freight	7	1, 811. 80	79, 200	....	180, 264	21, 768	133, 764	112. 321	21, 443	162	35, 661
Ferryboats	2	48. 45	1, 000	....	....	28, 600	2, 037	1, 726	311	4	1, 100
Total	9	1, 860. 25	80, 200	83, 436	180, 264	50, 368	135, 801	114, 047	21, 754	166	36, 761
Missouri, Osage, and Gasconade:											
Passenger and freight	15	2, 458. 85	70, 300	....	799, 344	26, 561	129, 620	106, 288	23, 332	243	41, 794
Towboats	10	573. 37	41, 700	....	161, 983	....	62, 357	50, 417	11, 940	70	24, 995
Ferryboats	24	1, 685. 49	94, 100	....	158, 035	249, 975	102, 493	72. 772	29, 721	104	47, 352
No traffic reported	3	42. 13	3, 600	....	....	....	....	....	....	....	....
Total	52	4, 759. 84	209, 700	159, 239	1, 119, 362	276, 536	294. 470	229, 477	64, 993	417	114, 141
Ohio:											
Passenger and freight	85	32, 688. 82	1, 209, 825	....	2, 314, 548	1, 191, 732	2, 168, 215	1, 850, 248	317, 967	2, 559	688, 407
Towboats	114	26, 708. 08	1, 680, 600	....	5, 211, 119	....	2, 168, 020	1, 657, 136	510, 884	2, 069	910, 946
Ferryboats	54	10, 918. 00	350, 250	....	244, 898	3, 924, 074	431, 267	246, 893	184, 374	266	142, 126
Harbor boats	48	4, 275. 11	301, 000	....	....	....	254, 934	198, 282	56, 652	462	152, 497
Miscellaneous	25	2, 978. 83	169, 200	....	....	....	48, 218	48, 218	....	68	23, 869
No traffic reported	54	7, 466. 78	388, 302	....	....	....	....	....	....	....	....
Total	380	85, 035. 62	4, 099, 177	2, 696, 020	7, 770, 565	5, 115, 806	5, 070, 654	4, 000, 777	1, 069, 877	5, 424	1, 917, 845
Allegheny:											
Passenger and freight	6	715. 84	53, 000	2, 040	365, 946	5, 319	20, 630	18, 449	2, 181	31	10, 670
Monongahela:											
Passenger and freight	8	1, 471. 48	75, 700	....	151, 725	130, 537	130, 664	107, 179	23, 485	81	45, 448
Towboats	25	3, 441. 97	246, 700	....	3, 143, 207	....	306, 810	233, 447	73, 363	287	120, 408
Ferryboats	3	263. 39	15, 000	....	....	130, 850	11, 238	10, 017	1, 221	12	7, 485
Miscellaneous	12	1, 057. 31	82, 200	....	....	....	48, 218	48, 218	....	42	22. 680
Total	48	6, 234. 15	419, 600	130, 898	3, 294, 932	261, 387	496, 930	398, 861	98, 069	422	196, 021
Muskingum:											
Passenger and freight	4	333. 35	16, 750	....	10, 281	37. 681	47, 571	35, 254	12, 317	67	17, 305
Towboats	2	219. 35	7, 000	....	....	....	7, 361	4, 915	2, 446	11	3, 406
Harbor boats	1	15. 09	1, 300	....	....	....	550	420	130	3	240
Total	7	567. 79	25, 050	27, 055	10, 281	37, 681	55, 482	40, 589	14, 893	81	20, 951
Little Kanawha:											
Passenger and freight	2	143. 56	10, 000	....	2, 968	9, 451	24, 471	12, 075	12, 396	18	4, 682
Towboats	1	34. 93	4, 000	....	112. 689	....	2, 000	1, 668	332	5	790
Harbor boats	1	25. 64	3, 000	....	....	....	3, 450	2, 600	850	4	1, 085
Miscellaneous	1	24. 05	1, 000	....	....	....	1, 000	1, 000	....	1	540
Total	5	228. 18	18, 000	14, 740	115, 657	9, 451	30, 921	17, 343	13, 578	28	7, 097

a See page 13.

TABLE 19.—GENERAL ACCOUNT—RÉSUMÉ—Continued.

NUMBER, TONNAGE, VALUE, OPERATIONS, FINANCIAL ACCOUNT, EMPLOYÉS, AND WAGES PAID OF ALL STEAMERS, ETC.—Continued.

RIVERS.	EQUIPMENT.			TRAFFIC.			INCOME AND EXPENDITURE.			EMPLOYÉS.	
	Number.	Tonnage.	Value.	* Miles traveled.	Freight moved. (Tons.)	Passengers carried.	Gross earnings.	Expenses.	Net earnings.	Number making up ordinary crews.	Total wages paid during year.
Great Kanawha:											
Passenger and freight	5	427.55	$23,500		112,838	53,599	$46,339	$36,288	$10,051	62	$19,410
Towboats	4	692.66	39,333		1,032,364		47,809	31,938	15,871	63	16,919
Ferryboats	2	102.47	8,000			38,525	13,283	6,965	6,318	8	3,420
Harbor boats	6	822.49	41,000				82,575	61,486	21,089	72	23,070
Miscellaneous	2	58.78	3,500				3,000	3,000		5	2,366
No traffic reported	2	282.18	8,000								
Total	21	2,386.13	123,333	59,680	1,145,202	92,124	193,006	139,677	53,329	210	65,185
Big Sandy:											
Passenger and freight	5	443.65	16,000		286,483	11,000	62,075	46.572	15,503	99	30,485
Harbor boats	3	344.02	24,000				32,843	23,307	9,536	42	13,440
Total	8	787.67	40,000	47,350	286,483	11,000	94,918	69,879	25,039	141	43,925
Kentucky:											
Passenger and freight	3	246.52	15,000		53,047	9,550	40,910	23,145	17,765	66	12,220
Towboats	1	77.88	4,000		203,903		17,911	10,721	7,190	15	4,110
No traffic reported	1	49.91	2,000								
Total	5	374.31	21,000	12,588	256,950	9,550	58,821	33,866	24,955	81	16,330
Green:											
Passenger and freight	5	316.68	13,500	10,300	819,278	11,200	31,889	27,154	4,735	43	5,416
Wabash:											
Passenger and freight	2	243.33	7,500		93,178	180	42,320	22,140	20,180	50	13,020
No traffic reported	1	53.67	2,500								
Total	3	297.00	10,000	12,700	93,178	180	42,320	22,140	20,180	50	13,020
Cumberland:											
Passenger and freight	13	2,631.48	100,800		217,534	19,160	179,688	153,412	26,276	440	73,345
Towboats	4	304.09	8,500		756,782		25,948	17,527	8,421	25	11,085
Total	17	2,935.57	109,300	144,968	974,316	19,160	205,636	170,939	34,697	465	84,430
Tennessee:											
Passenger and freight	23	5,851.24	210,500		219,170	27,185	331,345	289,699	41,646	609	140,537
Towboats	6	1,183.71	46,250		689,908		37,328	28,160	9,168	63	13,398
Ferryboats	2	259.67	3,000			903,100	32,133	13,034	19,099	15	10,800
No traffic reported	1	22.27	1,000								
Total	32	7,316.89	260,750	420,894	909,078	930,285	400,806	330,893	69,913	687	164,735
Lower Mississippi:											
Passenger and freight	74	31,898.33	1,186,300		2,985,399	518,267	3,040,334	2,742,406	297,928	2,968	1,032,012
Towboats	35	9,665.18	627,600		1,221,346		1,938,513	1,157,068	781,445	720	249,927
Ferryboats	45	2,831.74	392,200		168,016	1.933,048	442,169	362,431	79,738	337	183,972
Harbor boats	53	12,403.80	588,300				801,479	574,219	227,260	301	176,573
Miscellaneous	11	599.93	70,350				13,815	13,815		17	12,232
No traffic reported	47	5,077.09	287,622								
Total	265	62,476.07	3,152,372	1,826,254	4,374,761	2,451,315	6,236,310	4,849,939	1,386,371	4,343	1,654,716
White:											
Passenger and freight	5	1,229.71	45.000	68,786	86,393	4,183	100,697	82,443	18,254	119	41,997
Arkansas:											
Passenger and freight	9	1,785.91	46,700		1,662,717	2,651	57,199	44,881	12,318	141	27,753
Ferryboats	6	312.82	19,500		1,100	62,065	29,184	11,668	17,516	20	6,216
Total	15	2,098.73	66,200	61,689	1,663,817	64,716	86,383	56,549	29,834	161	33,969
Yazoo:											
Passenger and freight	11	1,409.68	62,000	121,216	77,380	5,391	144,068	125,469	18,599	255	60,754
Washita:											
Passenger and freight	3	994.52	45,000	60,828	93,707	1,204	125,180	103,220	21,960	144	43,756
Red:											
Passenger and freight	9	1,968.88	80,700	172,800	105,145	7,208	324,736	257,092	67.644	323	113,349
Red River of the North:											
Freight	3	411.17	12,500		3,637		5,661	4,246	1,415	45	1,677
No traffic reported	1	22.65	1,500								
Total	4	433.82	14,000	1,084	3,637		5,661	4,246	1,415	45	1,677

TABLE 20.—COMPARATIVE STATISTICS.

NUMBER, TONNAGE, AND VALUE OF STEAMERS AND UNRIGGED CRAFT OWNED ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1880 AND 1889, GIVEN BY LOCALITIES.

RIVERS.	Year.	TOTAL, ALL CRAFT.			STEAMERS.			UNRIGGED.		
		Number.	Tonnage.	Value.	Number.	Tonnage.	Value.	Number.	Tonnage.	Value.
Total Mississippi valley	1880	5, 052	1, 161, 616. 86	$16, 379, 400	1, 198	251, 792. 85	$12, 009, 400	3, 854	909, 824. 01	$4, 370, 000
	1889	7, 453	3, 393, 379. 89	15, 335, 005	1, 114	210, 771. 89	10, 539, 251	6, 339	3, 182, 608. 00	4, 795, 754
Upper Mississippi	1880	652	242, 689. 59	4, 339, 050	366	83, 918. 09	3, 004, 050	*a*286	158, 771. 50	1, 335, 000
	1889	509	203, 889. 81	1, 896, 587	213	28, 204. 81	1, 671, 569	296	175, 685. 00	225, 018
Ohio	1880	4, 041	858, 524. 99	8, 696, 500	473	107, 472. 48	5, 661, 500	3, 568	751, 052. 51	3, 035, 000
	1889	6, 245	2, 920, 468. 83	8, 696, 341	537	107, 195. 83	5, 192, 710	5, 708	2, 813, 273. 00	3, 503, 631
Lower Mississippi	1880	315	48, 303. 06	2, 851, 550	315	48, 303. 06	2, 851, 550	....	....	....
	1889	580	247, 957. 59	4, 476, 472	308	70, 177. 59	3, 451, 272	272	177, 780. 00	1, 025, 200
Missouri, etc	1880	44	12, 099. 22	492, 300	44	12, 099. 22	492, 300	....	....	....
	1889	119	21, 063. 66	265, 605	56	5, 193. 66	223, 700	63	15, 870. 00	41, 905

a Including all unrigged owned on both the Upper and Lower Mississippi.

TABLE 21.—COMPARATIVE STATISTICS.

NUMBER, TONNAGE, AND VALUE OF ALL STEAM VESSELS OWNED ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1880 AND 1889, GIVEN BY OCCUPATIONS.

CLASSES.	Year.	Number.	Tonnage.	Value.
Total, all classes	1880	1, 198	251, 792. 85	$12, 009, 400
	1889	1, 114	210, 771. 89	10, 539, 251
Passenger and freight	1880	503	166. 375. 82	7, 059, 900
	1889	320	95, 215. 26	3, 661, 475
Ferry	1880	177	21, 306. 59	1. 022, 900
	1889	163	18, 593. 40	1, 056, 250
Towing and harbor	1880	477	63, 224. 95	3, 800, 500
	1889	431	72. 857. 51	4, 451, 333
Miscellaneous	1880	41	885. 49	126, 100
	1889	200	24, 105. 72	1, 370, 193

TABLE 22.—COMPARATIVE STATISTICS.

GROSS EARNINGS BY ALL CRAFT OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1880 AND 1889, TOGETHER WITH THE AMOUNT PAID OUT IN WAGES DURING THOSE YEARS.

RIVERS.	Year.	Gross earnings.	Paid in wages.
Total Mississippi valley	1880	$20, 293, 173	$6. 979, 226
	1889	16, 337, 533	5, 338, 862
Upper Mississippi	1880	7, 668, 864	2, 204, 644
	1889	2. 318. 015	728. 878
Ohio	1880	7, 628. 924	2. 847, 085
	1889	6, 702. 013	2, 545. 625
Lower Mississippi	1880	4, 168. 989	1, 626, 029
	1889	7, 017, 374	1, 948, 541
Missouri, etc	1880	826, 396	301. 468
	1889	300, 131	115, 818

TABLE 23.—COMPARATIVE STATISTICS.

NUMBER OF MEN CONSTITUTING TOTALS OF ORDINARY CREWS EMPLOYED ON ALL CRAFT OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1880 AND 1889, TOGETHER WITH WAGES PAID, AND CALCULATED AVERAGES OF ANNUAL PAY, AND DECREASE OR INCREASE PER MAN, GIVEN BY LOCALITIES.

RIVERS.	Year.	Total number men ordinary crews.	Total wages paid.	Average annual wages per man.	Average annual increase in wages per man.	Average annual decrease in wages per man.
Total Mississippi valley	1880	23, 616	$6, 979, 226	$295. 53	....	....
	1889	15, 996	5, 338, 862	333. 76	$38. 23	....
Upper Mississippi	1880	7, 824	2, 204, 644	281. 78	....	....
	1889	2, 526	728, 878	288. 55	6. 77	....
Ohio	1880	9, 090	2, 847, 085	313. 21	....	....
	1889	7, 663	2, 545, 625	332. 20	18. 99	....
Lower Mississippi	1880	5, 655	1, 626, 029	287. 54	....	....
	1889	5, 345	1, 948, 541	364. 55	77. 01	....
Missouri, etc	1880	1, 047	301, 468	287. 94	....	....
	1889	462	115, 818	250. 69	....	$37. 25

TABLE 24.—COMPARATIVE STATISTICS.

NUMBER OF TONS OF FREIGHT MOVED AND NUMBER OF PASSENGERS CARRIED BY ALL CRAFT OPERATING ON THE RIVERS OF THE MISSISSIPPI VALLEY IN 1880 AND 1889, GIVEN BY LOCALITIES.

RIVERS.	Year.	FREIGHT.			PASSENGER.		
		Total.	By steamers.	On barges.	Total.	Regular.	Ferry.
Total Mississippi valley	1880	18, 946, 522	13, 557, 884	5, 388, 638	6, 728, 067	1, 528, 083	5, 199, 984
	1889	29, 405, 046	10, 345, 504	19, 059, 542	10, 858, 894	2, 384, 248	8, 474, 646
Upper Mississippi	1880	3, 565, 338	698, 218	2, 867, 120	1, 299, 553	341, 371	958, 182
	1889	5, 838, 978	1, 194, 245	4, 644, 733	1, 545, 198	312, 189	1, 233, 009
Ohio	1880	11, 738, 909	9, 217, 391	2, 521, 518	3, 961, 798	960, 936	3, 000, 862
	1889	16, 041, 866	3, 806, 665	12, 235, 201	6, 503, 143	1, 506, 594	4, 996, 549
Lower Mississippi	1880	3, 576, 972	3, 576, 972	....	1, 385, 357	212, 417	1, 172, 940
	1889	6, 401, 203	4, 387, 215	2, 013, 988	2, 534, 017	538, 904	1, 995, 113
Missouri, etc	1880	65, 303	65, 303	....	81, 359	13, 359	68, 000
	1889	1, 122, 999	957, 379	165, 620	276, 536	26, 561	249, 975

TABLE 25.—COMPARATIVE STATISTICS.

NUMBER AND TONNAGE OF ALL STEAMERS AND BARGES REGISTERED IN THE CUSTOMS DISTRICTS OF THE MISSISSIPPI VALLEY FOR THE YEARS 1880 TO 1889, INCLUSIVE. (a)

CUSTOMS DISTRICTS.	1880						1881					
	TOTAL.		STEAMERS.		BARGES.		TOTAL.		STEAMERS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	2,295	473,792.03	1,225	256,915.99	1,070	216,876.04	1,424	393,946.89	1,191	246,997.37	233	146,949.52
New Orleans, Louisiana	173	30,113.39	167	29,413.31	6	700.08	177	31,432.02	171	30,731.94	6	700.08
Natchez, Mississippi	3	191.83	3	191.83	....	....	....	....	....	....	....	....
Vicksburg, Mississippi	29	3,436.49	27	2,963.32	2	473.17	....	....	....	....	....	....
Memphis, Tennessee	66	10,779.65	66	10,779.65	....	....		11,302.58	65	11,302.58	....	....
Nashville, Tennessee	26	3,621.37	26	3,621.37	....	....	29	4,599.08	29	4,599.08	....	....
Louisville, Kentucky	53	17,749.68	53	17,749.68	....	....	58	17,539.28	58	17,539.28	....	....
Saint Louis, Missouri	319	141,974.94	162	59,699.13	157	82,275.81	313	180,119.99	153	54,392.72	160	125,727.27
Burlington, Iowa	31	2,414.25	31	2,414.25	....	....	42	4,624.03	42	4,624.03	....	....
Dubuque, Iowa	29	3,696.79	29	3,696.79	....	....	31	3,757.13	31	3,757.13	....	....
Lacrosse, Wisconsin	40	6,227.86	39	6,200.61	1	27.25	45	6,626.74	44	6,599.49	1	27.25
Minnesota (b)	80	8,141.78	48	5,873.06	32	2,268.72	54	6,908.80	45	6,003.50	9	905.30
Galena, Illinois	25	2,267.41	25	2,267.41	....	....	23	2,119.97	23	2,119.97	....	....
Cairo, Illinois	41	7,888.58	28	4,323.36	13	3,565.22	43	7,194.76	31	3,849.03	12	3,345.73
Evansville, Indiana	67	6,403.87	66	5,708.97	1	694.90	60	5,564.53	60	5,564.53	....	....
Cincinnati, Ohio	174	50,551.95	116	39,931.44	58	10,620.51	110	38,628.88	110	38,628.88	....	....
Wheeling, West Virginia	432	43,419.05	142	16,711.88	290	26,707.17	137	16,056.20	137	16,056.20	....	....
Pittsburg, Pennsylvania	678	129,025.97	168	39,482.76	510	89,543.21	205	50,752.58	160	34,508.69	45	16,243.89
Omaha, Nebraska	29	5,887.17	29	5,887.17	....	....	32	6,720.32	32	6,720.32	....	....

	1882						1883					
Total	1,438	389,644.39	1,226	249,210.10	212	140,434.29	1,312	361,047.68	1,163	243,317.19	149	117,730.49
New Orleans, Louisiana	177	28,306.53	172	28,075.83	5	230.70	132	21,199.21	132	21,199.21	....	....
Natchez, Mississippi	5	254.33	5	254.33	....	....	4	239.87	4	239.87	....	....
Vicksburg, Mississippi	3	44.67	3	44.67	....	....	28	3,583.33	28	3,583.33	....	....
Memphis, Tennessee	65	10,426.37	65	10,426.37	....	....	73	11,503.30	73	11,503.30	....	....
Nashville, Tennessee	15	2,527.93	15	2,527.93	....	....	18	3,876.32	18	3,876.32	....	....
Chattanooga, Tennessee	13	1,567.44	13	1,567.44	....	....	17	1,936.11	17	1,936.11	....	....
Louisville, Kentucky	60	17,938.08	60	17,938.08	....	....	57	18,118.07	57	18,118.07	....	....
Saint Louis, Missouri	308	178,598.35	163	57,933.02	145	120,665.33	295	178,276.29	160	62,349.88	135	115,926.41
Kansas city, Missouri	....	....	....	....	....	....	1	112.57	1	112.57	....	....
Burlington, Iowa	43	4,305.05	43	4,305.05	....	....	45	4,815.52	45	4,815.52	....	....
Dubuque, Iowa	24	3,369.81	24	3,369.81	....	....	27	4,719.56	27	4,719.56	....	....
Lacrosse, Wisconsin	46	6,436.36	45	6,409.11	1	27.25	35	3,027.59	35	3,027.59	....	....
Minnesota	58	7,473.66	48	6,452.21	10	1,021.45	59	7,861.19	46	6,328.49	13	1,532.70
Galena, Illinois	23	2,518.37	23	2,518.37	....	....	25	2,771.63	25	2,771.63	....	....
Cairo, Illinois	36	5,744.58	30	3,498.91	6	2,245.67	32	3,940.42	31	3,669.04	1	271.38
Evansville, Indiana	58	5,842.88	58	5,842.88	....	....	64	6,051.50	64	6,051.50	....	....
Cincinnati, Ohio	114	37,486.94	114	37,486.94	....	....	110	35,013.12	110	35,013.12	....	....
Wheeling, West Virginia	144	17,329.99	144	17,329.99	....	....	110	14,704.74	110	14,704.74	....	....
Pittsburg, Pennsylvania	214	52,710.55	169	36,466.66	45	16,243.89	157	34,803.49	157	34,803.49	....	....
Omaha, Nebraska	32	6,762.50	32	6,762.50	....	....	23	4,493.85	23	4.493.85	....	....

(a) Compiled from reports furnished by commissioner of navigation.

(b) Comprising the ports of Saint Vincent and Saint Paul.

TABLE **25.**—COMPARATIVE STATISTICS—Continued.

NUMBER AND TONNAGE OF ALL STEAMERS AND BARGES REGISTERED IN THE CUSTOMS DISTRICTS OF THE MISSISSIPPI VALLEY FOR THE YEARS 1880 TO 1889, INCLUSIVE—Continued.

CUSTOMS DISTRICTS.	1884						1885					
	TOTAL.		STEAMERS.		BARGES.		TOTAL.		STEAMERS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	1,302	356,263.61	1,157	241,007.35	145	115,256.26	1,289	346,054.19	1,149	231,675.84	140	114,378.35
New Orleans, Louisiana	138	20,834.85	138	20,834.85	....	....	127	20,147.83	127	20,147.83	....	....
Natchez, Mississippi	4	452.25	4	452.25	....	....	3	303.23	3	303.23	....	....
Vicksburg, Mississippi	30	3,298.74	30	3,298.74	....	....	32	3,637.74	32	3,637.74	....	....
Memphis, Tennessee	73	14,977.04	73	14,977.04	....	....	72	13,807.31	72	13,807.31	....	....
Nashville, Tennessee	22	4,020.17	22	4,020.17	....	....	16	3,562.51	16	3,562.51	....	....
Chattanooga, Tennessee	16	2,771.84	16	2,771.84	....	....	18	3,052.59	18	3,052.59	....	....
Paducah, Kentucky	9	651.62	9	651.62	....	....	18	1,412.84	18	1,412.84	....	....
Louisville, Kentucky	53	18,175.15	53	18,175.15	....	....	56	15,902.25	56	15,902.25	....	....
Saint Louis, Missouri	268	168,824.60	136	55,345.60	132	113,479.00	269	165,924.62	141	53,052.15	128	112,872.47
Kansas city, Missouri	11	1,129.20	11	1,129.20	....	....	11	1,125.20	11	1,125.20	....	....
Saint Joseph, Missouri	....	....	....	....	....	....	3	297.06	3	297.06	....	....
Burlington, Iowa	46	4,984.63	46	4,984.63	....	....	45	4,828.52	45	4,828.52	....	....
Dubuque, Iowa	22	4,368.02	22	4,368.02	....	....	23	4,299.70	23	4,299.70	....	....
Omaha, Nebraska	19	3,787.46	19	3,787.46	....	....	21	4,013.28	21	4,013.28	....	....
Minnesota	60	8,271.10	48	6,765.22	12	1,505.88	56	7,416.37	44	5,910.49	12	1,505.88
Lacrosse, Wisconsin	43	3,626.31	43	3,626.31	....	....	40	3,666.65	40	3,666.65	....	....
Galena, Illinois	23	2,319.23	23	2,319.23	....	....	24	2,527.21	24	2,527.21	....	....
Cairo, Illinois	25	4,269.91	24	3,998.53	1	271.38	18	3,508.36	18	3,508.36	....	....
Evansville, Indiana	67	8,710.09	67	8,710.09	....	....	60	8,727.89	60	8,727.89	....	....
Cincinnati, Ohio	101	31,610.42	101	31,610.42	....	....	110	32,746.76	110	32,746.76	....	....
Wheeling, West Virginia	109	14,583.83	109	14,583.83	....	....	112	13,479.07	112	13,479.07	....	....
Pittsburg, Pennsylvania	163	34,597.15	163	34,597.15	....	....	155	31,667.20	155	31,667.20	....	....

	1886						1887					
Total	1,247	334,810.06	1,105	221,088.76	142	113,721.30	1,292	327,313.55	1,144	217,941.56	148	109,371.99
New Orleans, Louisiana	125	20,395.66	125	20,395.66	....	....	129	19,808.80	129	19,808.80	....	....
Natchez, Mississippi	3	303.23	3	303.23	....	....	3	303.23	3	303.23	....	....
Vicksburg, Mississippi	30	2,555.51	30	2,555.51	....	....	30	2,723.39	30	2,723.39	....	....
Memphis, Tennessee	70	13,774.98	70	13,774.98	....	....	82	14,901.67	82	14,901.67	....	....
Nashville, Tennessee	19	4,088.45	19	4,088.45	....	....	17	3,469.49	17	3,469.49	....	....
Chattanooga, Tennessee	15	2,665.32	15	2,665.32	....	....	17	3,546.92	17	3,546.92	....	....
Paducah, Kentucky	23	3,496.24	23	3,496.24	....	....	29	4,270.03	29	4,270.03	....	....
Louisville, Kentucky	57	14,997.73	57	14,997.73	....	....	55	12,176.58	55	12,176.58	....	....
Saint Louis, Missouri	252	161,478.54	129	49,738.90	123	111,739.64	250	153,829.16	132	47,153.20	118	106,675.96
Kansas city, Missouri	14	1,185.35	13	1,159.54	1	25.81	13	1,164.66	13	1,164.66	....	....
Saint Joseph, Missouri	4	687.55	4	687.55	....	....	6	746.57	6	746.57	....	....
Omaha, Nebraska	22	3,636.56	22	3,636.56	....	....	19	2,934.96	19	2,934.96	....	....
Burlington, Iowa	49	5,250.75	45	4,908.84	4	341.91	52	5,182.35	43	4,656.02	9	526.33
Dubuque, Iowa	24	4,564.89	24	4,564.89	....	....	22	4,370.74	22	4,370.74	....	....
Minnesota	59	8,010.15	46	6,431.21	13	1,578.94	65	8,272.87	49	6,504.93	16	1,767.94
Lacrosse, Wisconsin	41	3,383.25	41	3,383.25	....	....	48	3,932.78	45	3,655.02	3	277.76
Galena, Illinois	24	2,577.81	23	2,542.81	1	35.00	28	3,170.85	26	3,046.85	2	124.00
Evansville, Indiana	55	8,198.62	55	8,198.62	....	....	53	7,309.70	53	7,309.70	....	....
Cincinnati, Ohio	106	31,594.03	106	31,594.03	....	....	107	30,535.73	107	30,535.73	....	....
Wheeling, West Virginia	101	10,475.45	101	10,475.45	....	....	109	11,951.21	109	11,951.21	....	....
Pittsburg, Pennsylvania	154	31,489.99	154	31,489.99	....	....	158	32,711.86	158	32,711.86	....	....

TABLE 25.—COMPARATIVE STATISTICS—Continued.

NUMBER AND TONNAGE OF ALL STEAMERS AND BARGES REGISTERED IN THE CUSTOMS DISTRICTS OF THE MISSISSIPPI VALLEY FOR THE YEARS 1880 TO 1889, INCLUSIVE—Continued.

CUSTOMS DISTRICTS.	1888						1889					
	TOTAL.		STEAMERS.		BARGES.		TOTAL.		STEAMERS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	1,253	304,990.93	1,122	214,035.55	131	90,955.38	1,246	299,335.54	1,114	209,826.07	132	89,509.47
New Orleans, Louisiana	127	19,447.03	127	19,447.03	....	....	126	19,248.58	126	19,248.58	....	....
Natchez, Mississippi	4	592.35	4	592.35	....	....	4	592.35	4	592.35	....	....
Vicksburg, Mississippi	30	2,932.28	30	2,932.28	....	....	30	2,875.99	30	2,875.99	....	....
Memphis, Tennessee	66	11,167.28	66	11,167.28	....	....	71	12,113.76	71	12,113.76	....	....
Chattanooga, Tennessee	20	4,048.30	20	4,048.30	....	....	22	3,966.09	22	3,966.09	....	....
Paducah, Kentucky	42	6,555.71	42	6,555.71	....	....	53	8,781.24	53	8,781.24	....	....
Louisville, Kentucky	45	11,024.75	45	11,024.75	....	....	52	11,937.92	52	11,937.92	....	....
Saint Louis, Missouri	219	134,103.07	123	46,210.35	96	87,892.72	208	129,249.39	115	42,827.04	93	86,422.35
Kansas city, Missouri	16	1,381.63	13	1,185.00	3	196.63	16	1,781.35	16	1,781.35	....	....
Saint Joseph, Missouri	6	368.72	6	368.72	....	....	6	340.53	6	340.53	....	....
Omaha, Nebraska	19	2,687.46	19	2,687.46	....	....	13	1,329.55	13	1,329.55	....	....
Burlington, Iowa	51	4,987.01	42	4,506.75	9	480.26	56	5,718.95	43	5,059.39	13	659.56
Dubuque, Iowa	28	5,100.10	27	5,050.44	1	49.66	29	6,408.82	28	6,355.26	1	53.56
Minnesota	61	7,758.76	47	5,986.17	14	1,772.59	61	6,691.30	46	5,213.56	15	1,477.74
Lacrosse, Wisconsin	50	4,191.55	45	3,768.56	5	422.99	54	4,639.76	47	3,884.03	7	755.73
Galena, Illinois	29	3,243.23	26	3,102.70	3	140.53	30	3,270.13	27	3,129.60	3	140.53
Evansville, Indiana	60	8,166.47	60	8,166.47	....	....	54	6,950.76	54	6,950.76	....	....
Cincinnati, Ohio	116	32,751.31	116	32,751.31	....	....	115	31,406.87	115	31,406.87	....	....
Wheeling, West Virginia	109	11,611.52	109	11,611.52	....	....	94	9,768.97	94	9,768.97	....	....
Pittsburg, Pennsylvania	155	32,872.40	155	32,872.40	....	....	152	32,263.23	152	32,263.23	....	....

RECAPITULATION FOR THE 10 YEARS.

YEARS.	TOTAL.		STEAMERS.		BARGES.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
1880	2,295	473,792.03	1,225	256,915.99	1,070	216,876.04
1881	1,424	393,946.89	1,191	246,997.37	233	146,949.52
1882	1,438	389,644.39	1,226	249,210.10	212	140,434.29
1883	1,312	361,047.68	1,163	243,317.19	149	117,730.49
1884	1,302	356,263.61	1,157	241,007.35	145	115,256.26
1885	1,289	346,054.19	1,149	231,675.84	140	114,378.35
1886	1,247	334,810.06	1,105	221,088.76	142	113,721.30
1887	1,292	327,313.55	1,144	217,941.56	148	109,371.99
1888	1,253	304,990.93	1,122	214,035.55	131	90,955.38
1889	1,246	299,335.54	1,114	209,826.07	132	89,509.47

TABLE 26.—NUMBER, AGGREGATE TONNAGE, AND AVERAGE VESSEL TONNAGE OF ALL STEAMERS REGISTERED AT THE CUSTOMS DISTRICTS OF THE MISSISSIPPI VALLEY IN THE YEARS 1880 TO 1889, INCLUSIVE. (*a*)

CUSTOMS DISTRICTS.	1880			1881			1882			1883			1884		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
New Orleans, Louisiana	167	29,413	176	171	30,732	180	172	28,076	163	132	21,199	161	138	20,835	151
Natchez, Mississippi	3	192	64				5	254	51	4	240	60	4	452	113
Vicksburg, Mississippi	27	2,963	110				3	45	15	28	3,583	128	30	3,299	110
Memphis, Tennessee	66	10,780	163	65	11,303	174	65	10,426	160	73	11,503	158	73	14,977	205
Nashville, Tennessee	26	3,621	139	29	4,599	159	15	2,528	169	18	3,876	215	22	4,020	183
Chattanooga, Tennessee							13	1,567	121	17	1,936	114	16	2,772	173
Louisville, Kentucky	53	17,750	335	58	17,539	302	60	17,938	299	57	18,118	318	53	18,175	343
Paducah, Kentucky													9	652	72
Saint Louis, Missouri	162	59,699	369	153	54,393	356	163	57,933	355	160	62,350	390	136	55,346	407
Kansas city, Missouri										1	113	113	11	1,129	103
Saint Joseph, Missouri															
Burlington, Iowa	31	2,414	78	42	4,624	110	43	4,305	100	45	4,816	107	46	4,985	108
Dubuque, Iowa	29	3,697	127	31	3,757	121	24	3,370	140	27	4,720	175	22	4,368	199
Lacrosse, Wisconsin	39	6,201	159	44	6,599	150	45	6,409	142	35	3,028	87	43	3,626	84
Minnesota (*b*)	48	5,873	122	45	6,004	133	48	6,452	134	46	6,328	138	48	6,765	141
Galena, Illinois	25	2,267	91	23	2,120	92	23	2,518	109	25	2,772	111	23	2,319	101
Cairo, Illinois	28	4,323	154	31	3,849	124	30	3,499	117	31	3,669	118	24	3,999	167
Evansville, Indiana	66	5,709	87	60	5,565	93	58	5,843	101	64	6,052	95	67	8,710	130
Cincinnati, Ohio	116	39,931	344	110	38,629	351	114	37,487	329	110	35,013	318	101	31,610	313
Wheeling, West Virginia	142	16,712	118	137	16,056	117	144	17,330	120	110	14,705	134	109	14,584	134
Pittsburg, Pennsylvania	168	39,483	235	160	34,509	216	169	36,467	216	157	34,803	222	163	34,597	212
Omaha, Nebraska	29	5,887	203	32	6,720	210	32	6,763	211	23	4,494	195	19	3,787	199

CUSTOMS DISTRICTS.	1885			1886			1887			1888			1889		
	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.	Number.	Tonnage.	Average.
New Orleans, Louisiana	127	20,148	159	125	20,396	163	129	19,809	154	127	19,447	153	126	19,249	153
Natchez, Mississippi	3	303	101	3	303	101	3	303	101	4	592	148	4	592	148
Vicksburg, Mississippi	32	3,638	114	30	2,556	85	30	2,723	91	30	2,932	98	30	2,876	96
Memphis, Tennessee	72	13,807	192	70	13,775	197	82	14,902	182	66	11,167	169	71	12,114	171
Nashville, Tennessee	16	3,563	223	19	4,088	215	17	3,469	204						
Chattanooga, Tennessee	18	3,053	170	15	2,665	178	17	3,547	209	20	4,048	202	22	3,966	180
Louisville, Kentucky	56	15,902	284	57	14,998	263	55	12,177	221	45	11,025	245	52	11,938	230
Paducah, Kentucky	18	1,413	79	23	3,496	152	29	4,270	147	42	6,556	156	53	8,781	166
Saint Louis, Missouri	141	53,052	376	129	49,739	386	132	47,153	357	123	46,210	376	115	42,827	372
Kansas city, Missouri	11	1,125	102	13	1,160	89	13	1,165	90	13	1,185	91	16	1,781	111
Saint Joseph, Missouri	3	297	99	4	688	172	6	747	125	6	369	62	6	341	57
Burlington, Iowa	45	4,829	107	45	4,909	109	43	4,656	108	42	4,507	107	43	5,059	118
Dubuque, Iowa	23	4,300	187	24	4,565	190	22	4,371	199	27	5,050	187	28	6,355	227
Lacrosse, Wisconsin	40	3,667	92	41	3,383	83	45	3,655	81	45	3,769	84	47	3,884	83
Minnesota	44	5,910	134	46	6,431	140	49	6,505	133	47	5,986	127	46	5,214	113
Galena, Illinois	24	2,527	105	23	2,543	111	26	3,047	117	26	3,103	119	27	3,130	116
Cairo, Illinois	18	3,508	195												
Evansville, Indiana	60	8,728	145	55	8,199	149	53	7,310	138	60	8,166	136	54	6,951	129
Cincinnati, Ohio	110	32,747	298	106	31,594	298	107	30,536	285	116	32,751	282	115	31,407	273
Wheeling, West Virginia	112	13,479	120	101	10,475	104	109	11,951	110	109	11,612	107	94	9,769	104
Pittsburg, Pennsylvania	155	31,667	204	154	31,490	204	158	32,712	207	155	32,872	212	152	32,263	212
Omaha, Nebraska	21	4,013	191	22	3,637	165	19	2,935	154	19	2,687	141	13	1,330	102

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a Compiled from information furnished by commissioner of navigation.

b Comprising the ports of Saint Vincent and Saint Paul.

TABLE 27.—AVERAGE ANNUAL NUMBER OF STEAMERS AND AVERAGE ANNUAL TONNAGE REGISTERED AT THE CUSTOMS DISTRICTS OF THE MISSISSIPPI VALLEY IN THE YEARS 1880 TO 1889, INCLUSIVE, TOGETHER WITH THE INDICATED YEARS OF HIGHEST, LOWEST, AND MEAN REGISTRATION. (*a*)

CUSTOMS DISTRICTS.	Annual average number of vessels registered.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.	Annual average registered tonnage.	HIGHEST ABOVE AVERAGE.		LOWEST BELOW AVERAGE.		CLOSEST TO AVERAGE.		Fluctuation.
		Year.	Number.	Year.	Number.	Year.	Number.			Year.	Number of tons.	Year.	Number of tons.	Year.	Number of tons.	
New Orleans, Louisiana	141. 40	1882	172	1886	125	1884	138	47	22, 930. 40	1881	30, 732	1889	19, 249	1883	21, 199	11, 483
Natchez, Mississippi	3. 67	1882	5	1880	3	1883	4	2	359. 11	1888	592	1880	192	1885	303	400
Vicksburg, Mississippi	26. 67	1885	32	1882	3	1880	27	29	2, 735. 00	1885	3, 638	1886	2, 556	1887	2, 723	1, 082
Memphis, Tennessee	70. 30	1887	82	1881	65	1886	70	17	12, 475. 40	1884	14, 977	1882	10, 426	1889	12, 114	4, 551
Nashville, Tennessee	20. 25	1881	29	1882	15	1886	19	14	3, 720. 50	1881	4, 599	1882	2, 528	1880	3, 621	2, 071
Chattanooga, Tennessee	17. 25	1889	22	1882	13	1883	17	9	2, 944. 25	1888	4, 048	1882	1, 567	1885	3, 053	2, 481
Louisville, Kentucky	54. 60	1882	60	1888	45	1887	55	15	15, 556. 00	1884	18, 175	1888	11, 025	1885	15, 902	7, 150
Paducah, Kentucky	29. 00	1889	53	1884	9	1887	29	44	4, 194. 67	1889	8, 781	1884	652	1887	4, 270	8, 129
Saint Louis, Missouri	141. 40	1882	163	1889	115	1885	141	48	52, 870. 20	1883	62, 350	1889	42, 827	1885	53, 052	19. 523
Kansas city, Missouri	11. 14	1889	16	1883	1	1884	11	15	1, 094. 00	1889	1, 781	1883	113	1885	1, 125	1, 668
Saint Joseph, Missouri	5. 00	1887	6	1885	3	1887	6	3	488. 40	1887	747	1885	297	1888	369	450
Burlington, Iowa	42. 50	1884	46	1880	31	1881	42	15	4, 510. 40	1889	5, 059	1880	2, 414	1888	4, 507	2, 645
Dubuque, Iowa	25. 70	1881	31	1884	22	1883	27	9	4, 455. 30	1889	6, 355	1882	3, 370	1887	4, 371	2, 985
Lacrosse, Wisconsin	42. 40	1889	47	1883	35	1884	43	12	4, 422. 10	1881	6, 599	1883	3, 028	1889	3, 884	3, 571
Minnesota (*b*)	46. 70	1887	49	1885	44	1888	47	5	6, 146. 80	1884	6, 765	1889	5, 214	1881	6, 004	1, 551
Galena, Illinois	24. 50	1889	27	1881	23	1885	24	4	2, 634. 60	1889	3, 130	1881	2, 120	1886	2, 543	1, 010
Cairo, Illinois	27. 00	1881	31	1885	18	1880	28	13	3, 807. 83	1880	4, 323	1882	3, 499	1881	3, 849	824
Evansville, Indiana	59. 70	1884	67	1887	53	1881	60	14	7, 123. 30	1885	8, 728	1881	5, 565	1889	6, 951	3. 163
Cincinnati, Ohio	110. 50	1880	116	1884	101	1881	110	15	34, 170. 50	1880	39, 931	1887	30, 536	1883	35, 013	9, 395
Wheeling, West Virginia	116. 70	1882	144	1889	94	1885	112	50	13, 667. 30	1882	17, 330	1889	9, 769	1885	13, 479	7. 561
Pittsburg, Pennsylvania	159. 10	1882	169	1889	152	1881	160	17	34, 086. 30	1880	39, 483	1886	31, 490	1881	34, 509	7. 993
Omaha, Nebraska	22. 90	1881	32	1889	13	1883	23	19	4, 225. 30	1882	6, 763	1889	1, 330	1885	4. 013	5, 433

a Compiled from information furnished by commissioner of navigation.

b Comprising ports of Saint Vincent and Saint Paul.

TABLE 28.—COMPARATIVE STATISTICS.

NUMBER AND TONNAGE OF ALL STEAMERS AND BARGES BUILT IN THE CUSTOMS DISTRICTS OF THE MISSISSIPPI VALLEY DURING THE YEARS 1880 TO 1889, INCLUSIVE, TOGETHER WITH DATA SHOWING THE NUMBER AND TONNAGE OF SIDE-WHEEL STEAMERS, STERN-WHEEL STEAMERS, AND PROPELLERS BUILT DURING EACH YEAR AT EACH PORT. (a)

1880.

CUSTOMS DISTRICTS.	CLASS.						METHOD OF STEAMERS' PROPULSION.							
	Total.		Steamers.		Barges.		Total.		Side-wheel.		Stern-wheel.		Propeller.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	135	32,791.31	117	23,930.92	18	8,860.39	117	23,930.92	30	11,449.60	75	11,791.60	12	689.72
New Orleans, Louisiana	7	448.09	7	448.09			7	448.09			2	86.51	5	361.58
Memphis, Tennessee	5	434.50	5	434.50			5	434.50			5	434.50		
Nashville, Tennessee	4	390.36	4	390.36			4	390.36			4	390.36		
Louisville, Kentucky	21	8,953.93	17	5,302.11	4	3,651.82	17	5,302.11	4	2,186.02	12	3,069.69	1	46.40
Saint Louis, Missouri	22	3,755.27	18	2,023.52	4	1,731.75	18	2,023.52	10	1,647.88	8	375.64		
Dubuque, Iowa	1	456.96	1	456.96			1	456.96			1	456.96		
Burlington, Iowa	3	155.61	3	155.61			3	155.61			2	146.60	1	9.01
Omaha, Nebraska	1	78.08	1	78.08			1	78.08			1	78.08		
Lacrosse, Wisconsin	4	277.70	4	277.70			4	277.70			4	277.70		
Minnesota (b)	7	652.59	6	581.03	1	71.56	6	581.03			5	558.11	1	22.92
Cairo, Illinois	2	1,513.14	2	1,513.14			2	1,513.14	1	1,477.27	1	35.87		
Galena, Illinois	1	16.34	1	16.34			1	16.34	1	16.34				
Evansville, Indiana	8	355.96	8	355.96			8	355.96			6	201.04	2	154.92
Cincinnati, Ohio	24	7,883.67	18	6,484.08	6	1,399.59	18	6,484.08	6	3,902.59	12	2,581.49		
Wheeling, West Virginia	12	1,083.70	12	1,083.70			12	1,083.70	3	334.92	7	653.89	2	94.89
Pittsburg, Pennsylvania	13	6,335.41	10	4,329.74	3	2,005.67	10	4,329.74	5	1,884.58	5	2,445.16		

1881.

Total	182	81,188.88	129	24,587.06	53	56,601.82	129	24,587.06	24	6,925.70	82	15,435.70	23	2,225.66
New Orleans, Louisiana	6	1,252.54	6	1,252.54			6	1,252.54	3	1,096.01			3	156.53
Memphis, Tennessee	8	945.15	8	945.15			8	945.15			7	903.18	1	41.97
Nashville, Tennessee	5	363.75	5	363.75			5	363.75			5	363.75		
Louisville, Kentucky	28	15,398.79	21	7,464.93	7	7,933.86	21	7,464.93	10	3,315.14	8	3,418.87	3	730.92
Saint Louis, Missouri	42	34,019.09	13	2,253.95	29	31,765.14	13	2,253.95	6	1,315.47	7	938.48		
Dubuque, Iowa	2	365.74	2	365.74			2	365.74			2	365.74		
Burlington, Iowa	2	219.20	2	219.20			2	219.20			1	178.82	1	40.38
Omaha, Nebraska	2	87.16	2	87.16			2	87.16			2	87.16		
Minnesota	4	418.35	4	418.35			4	418.35	1	237.09	2	150.71	1	30.55
Lacrosse, Wisconsin	3	100.11	3	100.11			3	100.11	2	83.20	1	16.91		
Cairo, Illinois	3	1,222.60	2	64.10	1	1,158.50	2	64.10			1	48.26	1	15.84
Galena, Illinois	1	10.30	1	10.30			1	10.30					1	10.30
Evansville, Indiana	4	346.46	4	346.46			4	346.46			2	227.47	2	118.99
Cincinnati, Ohio	29	15,625.75	17	4,209.93	12	11,415.82	17	4,209.93	1	555.50	10	2,863.21	6	791.22
Wheeling, West Virginia	17	4,075.01	15	2,057.19	2	2,017.82	15	2,057.19			11	1,768.23	4	288.96
Pittsburg, Pennsylvania	26	6,738.88	24	4,428.20	2	2,310.68	24	4,428.20	1	323.29	23	4,104.91		

1882.

Total	152	35,816.95	134	24,671.90	18	11,145.05	134	24,671.90	12	6,576.18	100	17,123.97	22	971.75
New Orleans, Louisiana	7	337.35	7	337.35			7	337.35	1	23.61	1	149.91	5	163.83
Memphis, Tennessee	6	249.85	6	249.85			6	249.85	1	8.99	3	199.52	2	41.34
Nashville, Tennessee	2	83.13	2	83.13			2	83.13	1	24.39	1	58.74		
Chattanooga. Tennessee	1	153.90	1	153.90			1	153.90			1	153.90		
Louisville, Kentucky	24	15,176.07	18	8,429.81	6	6,746.26	18	8,429.81	5	6,001.47	13	2,428.34		
Saint Louis, Missouri	20	3,281.81	11	1,439.50	9	1,842.31	11	1,439.50			9	1,264.92	2	174.58
Dubuque, Iowa	1	191.55	1	191.55			1	191.55			1	191.55		
Burlington, Iowa	2	253.62	2	253.62			2	253.62			1	234.16	1	19.46
Omaha, Nebraska	1	33.06	1	33.06			1	33.06					1	33.06
Lacrosse, Wisconsin	4	320.97	4	320.97			4	320.97			4	320.97		
Minnesota	4	489.43	3	373.28	1	116.15	3	373.28			3	373.28		
Cairo, Illinois	5	531.36	5	531.36			5	531.36			1	168.87	4	362.49
Galena, Illinois	4	468.64	4	468.64			4	468.64			4	468.64		
Evansville, Indiana	6	336.92	6	336.92			6	336.92	1	9.59	3	254.19	2	73.14
Cincinnati, Ohio	20	5,504.33	18	3,064.00	2	2,440.33	18	3,064.00	3	508.13	13	2,488.66	2	67.21
Wheeling, West Virginia	18	1,981.16	18	1,981.16			18	1,981.16			18	1,981.16		
Pittsburg, Pennsylvania	27	6,423.80	27	6,423.80.			27	6,423.80			24	6,387.16	3	36.64

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a Compiled from information furnished by commissioner of navigation.

b Comprising ports of Saint Vincent and Saint Paul.

TABLE 28.—COMPARATIVE STATISTICS—Continued.

NUMBER AND TONNAGE OF ALL STEAMERS AND BARGES BUILT IN THE CUSTOMS DISTRICTS OF THE MISSISSIPPI VALLEY DURING THE YEARS 1880 TO 1889, INCLUSIVE, ETC.—Continued.

1883.

CUSTOMS DISTRICTS.	CLASS.						METHOD OF STEAMERS' PROPULSION.							
	Total.		Steamers.		Barges.		Total.		Side-wheel.		Stern-wheel.		Propeller.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	125	26,442.92	116	20,879.07	9	5,563.85	116	20,879.07	18	6,388.03	76	12,890.00	22	1,601.04
New Orleans, Louisiana	8	482.22	8	482.22			8	482.22	1	155.58	4	238.89	3	87.75
Memphis, Tennessee	10	582.04	10	582.04			10	582.04	3	283.39	1	27.97	6	270.68
Nashville, Tennessee	3	224.10	3	224.10			3	224.10	2	154.83	1	69.27		
Chattanooga, Tennessee	3	448.29	3	448.29			3	448.29			3	448.29		
Louisville, Kentucky	22	11,629.74	18	7,946.57	4	3,683.17	18	7,946.57	2	1,959.23	11	5,215.87	5	771.47
Saint Louis, Missouri	7	1,538.57	6	1,343.76	1	194.81	6	1,343.76	2	914.61	2	313.81	2	115.34
Burlington, Iowa	4	289.74	4	289.74			4	289.74			3	246.50	1	43.24
Dubuque, Iowa	2	231.06	2	231.06			2	231.06					2	231.06
Omaha, Nebraska	3	221.68	3	221.68			3	221.68			3	221.68		
Minnesota	8	880.23	5	368.98	3	511.25	5	368.98	1	35.87	2	277.22	2	55.89
Cairo, Illinois	3	242.74	3	242.74			3	242.74			3	242.74		
Galena, Illinois	1	148.48	1	148.48			1	148.48			1	148.48		
Evansville, Indiana	8	372.21	8	372.21			8	372.21	2	74.08	6	298.13		
Cincinnati, Ohio	15	4,026.27	14	2,851.65	1	1,174.62	14	2,851.65	2	251.13	11	2,574.91	1	25.61
Wheeling, West Virginia	22	2,085.30	22	2,085.30			22	2,085.30	1	196.21	21	1,889.09		
Pittsburg, Pennsylvania	6	3,040.25	6	3,040.25			6	3,040.25	2	2,363.10	4	677.15		

1884.

CUSTOMS DISTRICTS.	CLASS.						METHOD OF STEAMERS' PROPULSION.							
	Total.		Steamers.		Barges.		Total.		Side-wheel.		Stern-wheel.		Propeller.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	93	16,664.32	91	16,219.44	2	444.88	91	16,219.44	12	3,786.24	70	12,075.66	9	357.54
New Orleans, Louisiana	6	504.19	6	504.19			6	504.19			1	218.01	5	286.18
Vicksburg, Mississippi	1	110.34	1	110.34			1	110.34			1	110.34		
Memphis, Tennessee	4	522.44	4	522.44			4	522.44			4	522.44		
Nashville, Tennessee	2	384.93	2	384.93			2	384.93			2	384.93		
Chattanooga, Tennessee	1	32.72	1	32.72			1	32.72			1	32.72		
Louisville, Kentucky	15	6,105.72	15	6,105.72			15	6,105.72	3	2,677.31	12	3,428.41		
Saint Louis, Missouri	7	910.88	5	466.00	2	444.88	5	466.00	2	221.04	2	237.11	1	7.85
Burlington, Iowa	1	96.89	1	96.89			1	96.89			1	96.89		
Dubuque, Iowa	1	26.92	1	26.92			1	26.92					1	26.92
Omaha, Nebraska	3	73.17	3	73.17			3	73.17			3	73.17		
Minnesota	2	102.64	2	102.64			2	102.64	1	70.56	1	32.08		
Lacrosse, Wisconsin	4	236.73	4	236.73			4	236.73	1	61.10	1	139.04	2	36.59
Cairo, Illinois	1	31.74	1	31.74			1	31.74			1	31.74		
Galena, Illinois	2	253.26	2	253.26			2	253.26	1	198.31	1	54.95		
Evansville, Indiana	6	538.57	6	538.57			6	538.57	1	43.70	5	494.87		
Cincinnati, Ohio	6	1,009.35	6	1,009.35			6	1,009.35	1	140.46	5	868.89		
Wheeling, West Virginia	13	1,332.13	13	1,332.13			13	1,332.13	2	373.76	11	958.37		
Pittsburg, Pennsylvania	18	4,391.70	18	4,391.70			18	4,391.70			18	4,391.70		

1885.

CUSTOMS DISTRICTS.	CLASS.						METHOD OF STEAMERS' PROPULSION.							
	Total.		Steamers.		Barges.		Total.		Side-wheel.		Stern-wheel.		Propeller.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	81	11,220.37	81	11,220.37			81	11,220.37	6	4,342.18	65	6,137.95	10	740.24
New Orleans, Louisiana	8	367.73	8	367.73			8	367.73			5	257.82	3	109.91
Vicksburg, Mississippi	2	29.18	2	29.18			2	29.18			1	15.73	1	13.45
Memphis, Tennessee	5	380.66	5	380.66			5	380.66			5	380.66		
Chattanooga, Tennessee	1	31.30	1	31.30			1	31.30			1	31.30		
Louisville, Kentucky	15	4,273.00	15	4,273.00			15	4,273.00	2	2,200.32	13	2,072.68		
Saint Louis, Missouri	7	776.06	7	776.06			7	776.06	1	580.56	5	148.05	1	47.45
Kansas city, Missouri	1	20.45	1	20.45			1	20.45			1	20.45		
Omaha, Nebraska	2	60.55	2	60.55			2	60.55			2	60.55		
Burlington, Iowa	3	195.84	3	195.84			3	195.84			3	195.84		
Dubuque, Iowa	3	195.98	3	195.98			3	195.98	1	50.00	2	145.98		
Minnesota	1	103.54	1	103.54			1	103.54			1	103.54		
Cairo, Illinois	1	48.01	1	48.01			1	48.01			1	48.01		
Evansville, Indiana	5	281.94	5	281.94			5	281.94			4	217.98	1	63.96
Cincinnati, Ohio	10	2,375.99	10	2,375.99			10	2,375.99	2	1,511.30	6	451.98	2	412.71
Wheeling, West Virginia	13	1,237.02	13	1,237.02			13	1,237.02			12	1,225.20	1	11.82
Pittsburg, Pennsylvania	4	843.12	4	843.12			4	843.12			3	762.18	1	80.94

TABLE 28.—COMPARATIVE STATISTICS—Continued.

NUMBER AND TONNAGE OF ALL STEAMERS AND BARGES BUILT IN THE CUSTOMS DISTRICTS OF THE MISSISSIPPI VALLEY DURING THE YEARS 1880 TO 1889, INCLUSIVE, ETC.—Continued.

1886.

CUSTOMS DISTRICTS.	CLASS.						METHOD OF STEAMERS' PROPULSION.							
	Total.		Steamers.		Barges.		Total.		Side-wheel.		Stern-wheel.		Propeller.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	76	10,594.93	70	9,699.70	6	895.23	70	9,699.70	8	1,333.42	58	8,226.71	4	139.57
New Orleans, Louisiana	2	95.87	2	95.87	....	....	2	95.87	....	....	1	36.80	1	59.07
Vicksburg, Mississippi	2	63.80	2	63.80	....	....	2	63.80	....	....	2	63.80	....	....
Memphis, Tennessee	8	818.27	8	818.27	....	....	8	818.27	3	271.78	5	546.49	....	....
Nashville, Tennessee	2	131.67	2	131.67	....	....	2	131.67	....	....	2	131.67	....	....
Chattanooga, Tennessee	2	505.91	2	505.91	....	....	2	505.91	....	....	2	505.91	....	....
Paducah, Kentucky	2	305.20	2	305.20	....	....	2	305.20	....	....	2	305.20	....	....
Louisville, Kentucky	11	2,269.87	11	2,269.87	....	....	11	2,269.87	1	714.87	10	1,555.00	....	....
Saint Louis, Missouri	2	86.68	2	86.68	....	....	2	86.68	1	14.04	1	72.64	....	....
Kansas city, Missouri	1	25.81	1	25.81	....	....	1	25.81	....	....	1	25.81	....	....
Omaha, Nebraska	2	50.52	2	50.52	....	....	2	50.52	....	....	2	50.52	....	....
Burlington, Iowa	5	303.56	2	144.07	3	159.49	2	144.07	....	....	2	144.07	....	....
Dubuque, Iowa	2	260.35	2	260.35	....	....	2	260.35	....	....	2	260.35	....	....
Minnesota	4	309.06	3	235.20	1	73.86	3	235.20	....	....	2	212.55	1	22.65
Lacrosse, Wisconsin	4	142.57	4	142.57	....	....	4	142.57	1	24.47	2	90.88	1	27.22
Galena, Illinois	1	35.00	....	....	1	35.00	....	....	....	....	....	....	....	....
Evansville, Indiana	1	235.20	1	235.20	....	....	1	235.20	....	....	1	235.20	....	....
Cincinnati, Ohio	5	1,344.92	4	718.04	1	626.88	4	718.04	....	....	4	718.04	....	....
Wheeling, West Virginia	8	724.25	8	724.25	....	....	8	724.25	1	39.93	6	653.69	1	30.63
Pittsburg, Pennsylvania	12	2,886.42	12	2,886.42	....	....	12	2,886.42	1	268.33	11	2,618.09	....	....

1887.

CUSTOMS DISTRICTS.	CLASS.						METHOD OF STEAMERS' PROPULSION.							
	Total.		Steamers.		Barges.		Total.		Side-wheel.		Stern-wheel.		Propeller.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	79	10,900.93	69	10,167.73	10	733.20	69	10,167.73	6	2,170.99	55	7,872.06	8	124.68
New Orleans, Louisiana	4	89.37	4	89.37	....	....	4	89.37	....	....	2	52.38	2	36.99
Vicksburg, Mississippi	1	22.27	1	22.27	....	....	1	22.27	....	....	1	22.27	....	....
Memphis, Tennessee	9	610.78	9	610.78	....	....	9	610.78	....	....	7	592.02	2	18.76
Chattanooga, Tennessee	1	565.34	1	565.34	....	....	1	565.34	....	....	1	565.34	....	....
Paducah, Kentucky	1	235.20	1	235.20	....	....	1	235.20	....	....	1	235.20	....	....
Louisville, Kentucky	15	4,422.82	14	4,240.80	1	182.02	14	4,240.80	2	1,950.73	12	2,290.07	....	....
Saint Louis, Missouri	4	70.08	4	70.08	....	....	4	70.08	1	23.16	2	28.52	1	18.40
Kansas city, Missouri	1	21.86	1	21.86	....	....	1	21.86	....	....	1	21.86	....	....
Burlington, Iowa	5	184.42	....	....	5	184.42	....	....	....	....	....	....	....	....
Dubuque, Iowa	1	89.00	....	....	1	89.00	....	....	....	....	....	....	....	....
Minnesota	8	487.53	7	413.42	1	74.11	7	413.42	....	....	6	373.17	1	40.25
Lacrosse, Wisconsin	4	213.93	2	10.28	2	203.65	2	10.28	....	....	....	....	2	10.28
Evansville, Indiana	5	634.81	5	634.81	....	....	5	634.81	....	....	5	634.81	....	....
Cincinnati, Ohio	4	501.95	4	501.95	....	....	4	501.95	1	65.73	3	436.22	....	....
Wheeling, West Virginia	6	503.86	6	503.86	....	....	6	503.86	1	52.93	5	450.93	....	....
Pittsburg, Pennsylvania	10	2,247.71	10	2,247.71	....	....	10	2,247.71	1	78.44	9	2,169.27	....	....

1888.

CUSTOMS DISTRICTS.	CLASS.						METHOD OF STEAMERS' PROPULSION.							
	Total.		Steamers.		Barges.		Total.		Side-wheel.		Stern-wheel.		Propeller.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	84	11,859.15	74	11,371.56	10	487.59	74	11,371.56	9	4,312.73	59	6,830.91	6	227.92
New Orleans, Louisiana	6	391.91	6	391.91	....	....	6	391.91	....	....	5	265.33	1	126.58
Memphis, Tennessee	8	1,371.10	8	1,371.10	....	....	8	1,371.10	2	1,196.67	6	174.43	....	....
Nashville, Tennessee	1	102.48	1	102.48	....	....	1	102.48	....	....	1	102.48	....	....
Chattanooga, Tennessee	5	810.53	5	810.53	....	....	5	810.53	....	....	5	810.53	....	....
Paducah, Kentucky	3	493.75	3	493.75	....	....	3	493.75	....	....	3	493.75	....	....
Louisville, Kentucky	13	4,532.43	12	4,351.42	1	181.01	12	4,351.42	4	2,956.39	8	1,395.03	....	....
Saint Louis, Missouri	3	35.13	....	....	3	35.13	....	....	....	....	....	....	....	....
Kansas city, Missouri	1	80.35	1	80.35	....	....	1	80.35	....	....	1	80.35	....	....
Saint Joseph, Missouri	1	19.36	1	19.36	....	....	1	19.36	....	....	1	19.36	....	....
Dubuque, Iowa	2	237.66	2	237.66	....	....	2	237.66	....	....	2	237.66	....	....
Minnesota	7	334.57	6	311.92	1	22.65	6	311.92	....	....	5	301.95	1	9.97
Lacrosse, Wisconsin	3	235.67	1	121.92	2	113.75	1	121.92	....	....	1	121.92	....	....
Galena, Illinois	2	63.16	1	46.63	1	16.53	1	46.63	1	46.63	....	....	....	....
Evansville, Indiana	5	185.57	5	185.57	....	....	5	185.57	1	20.49	2	136.49	2	28.59
Cincinnati, Ohio	4	314.62	4	314.62	....	....	4	314.62	1	92.55	3	222.07	....	....
Wheeling, West Virginia	12	1,064.57	12	1,064.57	....	....	12	1,064.57	....	....	10	1,001.79	2	62.78
Pittsburg, Pennsylvania	8	1,586.29	6	1,467.77	2	118.52	6	1,467.77	....	....	6	1,467.77	....	....

TABLE 28.—COMPARATIVE STATISTICS—Continued.

NUMBER AND TONNAGE OF ALL STEAMERS AND BARGES BUILT IN THE CUSTOMS DISTRICTS OF THE MISSISSIPPI VALLEY DURING THE YEARS 1880 TO 1889, INCLUSIVE, ETC.—Continued.

1889.

CUSTOMS DISTRICTS.	CLASS.						METHOD OF STEAMERS' PROPULSION.							
	Total.		Steamers.		Barges.		Total.		Side-wheel.		Stern-wheel.		Propeller.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
Total	83	12, 202. 36	74	11, 556. 73	9	645. 63	74	11, 556. 73	2	980. 54	56	9, 289. 50	16	1, 286. 69
New Orleans, Louisiana	3	1, 079. 75	3	1, 079. 75	......	....	3	1, 079. 75	1	957. 31	......	....	2	122. 44
Memphis, Tennessee	7	1, 101. 98	7	1, 101. 98	......	....	7	1, 101. 98	1	23. 23	6	1, 078. 75	......	....
Chattanooga, Tennessee	3	134. 88	3	134. 88	......	....	3	134. 88	......	....	2	112. 61	1	22. 27
Paducah, Kentucky	7	980. 65	6	730. 01	1	250. 64	6	730. 01	......	....	5	686. 26	1	43. 75
Louisville, Kentucky	14	4, 392. 15	14	4, 392. 15	......	....	14	4, 392. 15	......	....	14	4, 392. 15	......	....
Saint Louis, Missouri	1	43. 05	1	43. 05	......	....	1	43. 05	......	....	1	43. 05	......	....
Kansas city, Missouri	1	20. 53	1	20. 53	......	....	1	20. 53	......	....	1	20. 53	......	....
Saint Joseph, Missouri	1	36. 00	1	36. 00	......	....	1	36. 00	......	....	1	36. 00	......	....
Burlington, Iowa	4	157. 11	......	....	4	157. 11	......	....	......	....	......	....	......	....
Dubuque, Iowa	5	724. 08	4	670. 52	1	53. 56	4	670. 52	......	....	2	644. 60	2	25. 92
Omaha, Nebraska	1	21. 71	1	21. 71	......	....	1	21. 71	......	....	1	21. 71	......	....
Minnesota	5	432. 28	3	330. 06	2	102. 22	3	330. 06	......	....	2	317. 86	1	12. 20
Lacrosse, Wisconsin	5	353. 29	4	271. 19	1	82. 10	4	271. 19	......	....	4	271. 19	......	....
Galena, Illinois	2	175. 62	2	175. 62	......	....	2	175. 62	......	....	1	142. 76	1	32. 86
Evansville, Indiana	2	92. 40	2	92. 40	......	....	2	92. 40	......	....	1	68. 08	1	24. 32
Cincinnati, Ohio	8	1, 082. 90	8	1, 082. 90	......	....	8	1, 082. 90	......	....	1	79. 97	7	1, 002. 93
Wheeling, West Virginia	6	493. 42	6	493. 42	......	....	6	493. 42	......	....	6	493. 42	......	....
Pittsburg, Pennsylvania	8	880. 56	8	880. 56	......	....	8	880. 56	......	....	8	880. 56	......	....

RECAPITULATION FOR THE 10 YEARS.

Total for 10 years	1, 090	249, 682. 12	955	164, 304. 48	135	85, 377. 64	955	164, 304. 48	127	48, 265. 61	696	107, 674. 06	132	8, 364. 81
1880	135	32, 791. 31	117	23, 930. 92	18	8, 860. 39	117	23, 930. 92	30	11, 449. 60	75	11, 791. 60	12	689. 72
1881	182	81, 188. 88	129	24, 587. 06	53	56, 601. 82	129	24. 587. 06	24	6, 925. 70	82	15, 435. 70	23	2, 225. 66
1882	152	35, 816. 95	134	24, 671. 90	18	11, 145. 05	134	24, 671. 90	12	6, 576. 18	100	17, 123. 97	22	971. 75
1883	125	26, 442. 92	116	20, 879. 07	9	5, 563. 85	116	20, 879. 07	18	6, 388. 03	76	12, 890. 00	22	1, 601. 04
1884	93	16, 664. 32	91	16, 219. 44	2	444. 88	91	16, 219. 44	12	3, 786. 24	70	12, 075. 66	9	357. 54
1885	81	11, 220. 37	81	11, 220. 37	......	....	81	11, 220. 37	6	4, 342. 18	65	6, 137. 95	10	740. 24
1886	76	10, 594. 93	70	9, 699. 70	6	895. 23	70	9, 699. 70	8	1, 333. 42	58	8, 226. 71	4	139. 57
1887	79	10, 900. 93	69	10, 167. 73	10	733. 20	69	10, 167. 73	6	2, 170. 99	55	7, 872. 06	8	124. 68
1888	84	11, 859. 15	74	11, 371. 56	10	487. 59	74	11, 371. 56	9	4, 312. 73	59	6, 830. 91	6	227. 92
1889	83	12, 202. 36	74	11, 556. 73	9	645. 63	74	11, 556. 73	2	980. 54	56	9, 289. 50	16	1, 286. 69

TABLE 29.—CONGRESSIONAL APPROPRIATIONS.

ITEMIZED STATEMENT OF THE SUMS APPROPRIATED BY CONGRESS FOR THE SURVEYS, IMPROVEMENT, AND MAINTENANCE OF THE WATER WAYS AND HARBORS OF THE MISSISSIPPI VALLEY, BY PERIODS, FROM THE EARLIEST DATE OF APPROPRIATION TO 1890, INCLUSIVE. (*a*)

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress, September, 1890.	Total appropriations up to date.
Grand total	1819	$28, 200, 707	$39, 290, 556	$9, 336, 200	$76, 827, 463
Total for Upper Mississippi system	1832	12, 792, 679	13, 234, 510	3, 246, 000	29, 273, 189
Total for Ohio system	1827	9, 396, 351	10, 011, 921	2, 331, 000	21, 739, 272
Total for Lower Mississippi system	1827	4, 604, 677	15, 916, 125	3, 734, 200	24, 255, 002
Total for Red River of the North	1876	65, 000	128, 000	25, 000	218, 000
Miscellaneous	1819	1, 342, 000			1, 342, 000
UPPER MISSISSIPPI SYSTEM.					
Upper Mississippi:					
At sources	1879	25, 000	634, 500	80, 000	739, 500
Above Falls of Saint Anthony	1875	120, 000	45, 000	18, 000	183, 000
At Falls of Saint Anthony	1870	480, 000	60, 000		540, 000
Meekers island	1873	25, 000			25, 000
Saint Paul to Des Moines	1844	533, 600	1, 972, 500	500, 000	3, 006, 100
Des Moines rapids	1852	4, 268, 500	386, 250	22, 000	4, 676, 750
Rock Island rapids	1866	1, 150, 650	16, 000		1, 166, 650
Des Moines to mouth of Illinois	1852	150, 000	1, 131, 000	165, 000	1, 446, 000
Illinois to Ohio river	1836	1, 554, 600	2, 705, 000	582, 000	4, 841, 600
Snagging	1870	115, 000	260, 000		375, 000
Total for Upper Mississippi	1836	8, 422, 350	7, 210, 250	1. 367, 000	16, 999, 600
Tributaries:					
Galena	1878	42, 000	24, 000	*b*100, 000	166, 000
Fox and Wisconsin (*c*)	1839	2, 028, 714	771, 260	100, 000	2, 899, 974
Minnesota	1867	117, 500	10, 000		127, 500
Hennepin canal	1882		45, 000	500, 000	545, 000
Cuivre	1880		12, 000		12, 000
Red Cedar	1839	1, 500			1, 500
Total for tributaries	1839	2, 189, 714	862, 260	700, 000	3, 751, 974
Total for Upper Mississippi	1836	8, 422, 350	7, 210, 250	1, 367, 000	16, 999, 600
Total for Upper Mississippi and tributaries	1836	10, 612, 064	8, 072, 510	2, 067, 000	20, 751, 574
Saint Croix	1878	18, 000	74, 500	8, 000	100, 500
Chippewa	1876	34, 465	128, 750	10, 000	173, 215
Illinois	1852	639, 150	947, 500	2, 000	1, 588, 650
Missouri:					
Upper	1876	100, 000	375, 000	300, 000	775, 000
Lower	1878	451, 500	2, 175, 000	800, 000	3, 426, 500
Whole river	1832	492, 500	1, 000, 000		1, 492, 500
Snagging	1836	200, 000	145, 000		345, 000
Surveys	1878	80, 000	115, 000		195, 000
Total for Missouri	1832	1, 324, 000	3, 810, 000	1, 100, 000	6, 234. 000
Tributaries:					
Osage	1871	140, 000	65, 000	55, 000	260, 000
Gasconade	1880		42, 500	4, 000	46, 500
Yellowstone	1870	25, 000	93, 750		118, 750
Total for tributaries	1871	165, 000	201, 250	59, 000	425, 250
Total for the Missouri	1832	1, 324, 000	3, 810, 000	1, 100, 000	6, 234, 000
Total for Missouri and tributaries	1832	1, 489, 000	4, 011, 250	1, 159, 000	6, 659, 250
Total for Upper Mississippi system	1832	12, 792, 679	13, 234, 510	3, 246, 000	29, 273, 189

a Compiled from information furnished by chief of engineers, United States army.

b Conditional.

c The appropriations were made "for the improvement of the water communication between Lake Michigan and the Mississippi river".

TABLE 29.—CONGRESSIONAL APPROPRIATIONS—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress, September, 1890.	Total appropriations up to date.
OHIO SYSTEM.					
Ohio:					
General improvements	1835	$2, 731, 500	$2, 459, 250	$300, 000	$5, 490, 750
Falls of Ohio and canal	1852	1, 305, 000	736, 563	85, 000	2, 126, 563
Together with purchase of Louisville and Portland canal	1873	1, 250, 000			1, 250, 000
Total for Ohio	1835	5, 286, 500	3, 195, 813	385, 000	8, 867, 313
Tributaries:					
Guyandotte	1878	3, 000	11, 500	2, 000	16, 500
Licking	1888		3, 000	3, 000	6, 000
Beaver River dam	1890			250, 000	250, 000
Tradewater	1881		16, 500		16, 500
Total for tributaries	1878	3, 000	31, 000	255, 000	289, 000
Total for Ohio	1835	5. 286, 500	3, 195, 813	385, 000	8, 867, 313
Total for Ohio and tributaries	1835	5, 289, 500	3, 226, 813	640, 000	9, 156, 313
Allegheny	1879	10, 000	222, 500	20, 000	252, 500
Monongahela	1872	187, 000	406, 733	162, 000	755, 733
Cheat	1890			13, 000	13, 000
Buckhannon	1884		4, 500	1, 000	5, 500
Total for Monongahela and tributaries	1872	187, 000	411, 233	176, 000	774, 233
Muskingum	1879	30, 000	389, 500	30, 000	449, 500
Little Kanawha	1876	43, 300	127, 875	40, 000	211, 175
Great Kanawha	1873	992, 000	1, 337, 500	300, 000	2, 629, 500
Harbor at mouth of	1884		15, 000		15, 000
Elk	1875	10, 500	16, 000	2, 500	29, 000
Gauley	1888		3, 000	3, 000	6, 000
Total for Great Kanawha and tributaries	1873	1, 002, 500	1, 371, 500	305, 500	2, 679, 500
Big Sandy	1878	24, 000	241, 500	31, 000	296, 500
Tug fork	1890			2, 500	2, 500
Levisa fork	1890			2, 500	2, 500
Total for Big Sandy and tributaries	1878	24, 000	241, 500	36, 000	301, 500
Kentucky	1879	100, 000	1, 067, 000	180, 000	1, 347, 000
Green (purchase of locks and dams)	1888		135, 000		135, 000
Rough creek	1890			25, 000	25, 000
Total for Green and tributaries	1888		135, 000	25, 000	160, 000
Wabash	1829	321, 500	319, 000	65, 500	706, 000
White, of Indiana	1879	25, 000	82, 000		107, 000
Total for Wabash and tributaries	1829	346, 500	401, 000	65, 500	813, 000
Cumberland:					
Above Nashville	1876	151, 000	470, 000	250, 000	871, 000
Below Nashville	1832	340, 000	80, 000	40, 000	460, 000
South fork of	1882		12, 000		12, 000
Total for Cumberland	1832	491, 000	562, 000	290, 000	1, 343, 000
Tributaries:					
Obey	1880		11, 500		11, 500
Caney fork	1880		22, 500	2, 500	25, 000
Total for tributaries	1880		34, 000	2. 500	36, 500
Total for Cumberland	1832	491, 000	562, 000	290, 000	1, 343, 000
Total for Cumberland and tributaries	1832	491, 000	596, 000	292. 500	1, 379, 500

TABLE 29.—CONGRESSIONAL APPROPRIATIONS—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress, September, 1890.	Total appropriations up to date.
OHIO SYSTEM—Continued.					
Tennessee:					
Below Chattanooga	1827	$1,548,051	$1,662,500	$475,000	$3,685,551
Above Chattanooga	1852	241,500	49,500	30,000	321,000
Total for Tennessee	1827	1,789,551	1,712,000	505,000	4,006,551
Tributaries:					
Duck	1880		13,000		13,000
Clinch	1880		31,000	4,000	35,000
Hiwassee	1876	23,000	10,000	1,500	34,500
French Broad, of Tennessee	1876	60,000	51,000	10,000	121,000
Little Tennessee	1882		5,000		5,000
Total for tributaries	1876	83,000	110,000	15,500	208,500
Total for Tennessee	1827	1,789,551	1,712,000	505,000	4,006,551
Total for Tennessee and tributaries	1827	1,872,551	1,822,000	520,500	4,215,051
Total for Ohio system	1827	9,396,351	10,011,921	2,331,000	21,739,272
LOWER MISSISSIPPI SYSTEM.					
Lower Mississippi (exclusive of passes) (*a*):					
From Ohio river to head of passes	1878	527,000	13,438,000	[b]3,200,000	17,165,000
Snagging	1836	225,000	536,750		761,750
Water gauges	1876	15,000	36,700		51,700
Total for Lower Mississippi	1836	767,000	14,011,450	3,200,000	17,978,450
Bayous:					
Bartholomew	1881		28,000	5,000	33,000
Black	1881		25,000		25,000
Bœuf	1881		26,000	5,000	31,000
Courtableau	1880		29,000	2,200	31,200
D'Arbonne	1884		9,000	2,000	11,000
Lafourche	1852	22,500	60,000	50,000	132,500
Loggy	1884		10,000		10,000
Pierre	1884		13,600		13,600
Atchafalaya (*c*)	1888				
Vidal	1880		1,000	1,000	2,000
Teche	1829	18,200	77,500	5,000	100,700
Terrebonne	1880		38,800		38,800
Steels	1884		7,500	2,500	10,000
Cypress	1872	94,000	23,000	10,000	127,000
Total for bayous	1829	134,700	348,400	82,700	565,800
Tributaries:					
Forked Deer, south fork of	1882		17,000	2,500	19,500
Saint Francis and Cache creek	1880		41,000	14,500	55,500
Big Black	1884		10,000	5,000	15,000
Big Hatchie	1880		27,000	5,000	32,000
L'Anguille	1878	15,000	2,000		17,000
Kaskaskia	1890			6,000	6,000
Little, of Missouri	1888		5,000	3,000	8,000
Total for tributaries	1878	15,000	102,000	36,000	153,000
Early appropriations for whole river, 1827 to 1879	1827	1,295,712			1,295,712
Total for tributaries	1878	15,000	102,000	36,000	153,000
Total for bayous	1829	134,700	348,400	82,700	565,800
Total for Lower Mississippi	1836	767,000	14,011,450	3,200,000	17,978,450
Total for Lower Mississippi, tributaries, and bayous	1827	2,212,412	14,461,850	3,318,700	19,992,962

[a] For the appropriations for the improvement at the mouth of the Mississippi, consisting of surveys, channel work, and jetties, amounting to $7,597,500, see table of appropriations for Gulf of Mexico.

[b] In the second session of Congress, in 1891, an additional $1,000,000 was appropriated.

[c] Amount included in general appropriation for the Lower Mississippi.

TABLE **29.**—CONGRESSIONAL APPROPRIATIONS—Continued.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress, September, 1890.	Total appropriations up to date.
LOWER MISSISSIPPI SYSTEM—Continued.					
White, of Arkansas	1874	$183,500	$153,000	$30,000	$366,500
Tributaries:					
Current	1872	5,000	2,000		7,000
Black, of Missouri	1880		68,000	12,000	80,000
Little Red	1886		8,400		8,400
Total for tributaries	1872	5,000	78,400	12,000	95,400
Total for White	1874	183,500	153,000	30,000	366,500
Total for White and tributaries	1872	188,500	231,400	42,000	461,900
Arkansas:					
Above Fort Smith	1876	40,000	113,000		153,000
At Fort Smith	1876	20,000	18,000		38,000
At Pine Bluff	1880		131,000		131,000
From Little Rock to mouth	1884		19,000		19,000
General improvement	1832	512,500		180,000	692,500
Snagging	1878	35,000	175,875	20,000	230,875
Total for Arkansas	1832	607,500	456,875	200,000	1,264,375
Tributaries:					
Fourche la Fave	1879	10,000	16,000	500	26,500
Petit Jean	1886		6,000		6,000
Total for tributaries	1879	10,000	22,000	500	32,500
Total for Arkansas	1832	607,500	456,875	200,000	1,264,375
Total for Arkansas and tributaries	1832	617,500	478,875	200,500	1,296,875
Yazoo	1873	107,000	83,000	25,000	215,000
Tributaries:					
Big Sunflower	1879	20,000	32,000	5,000	57,000
Coldwater	1879	7,000	4,000	10,000	21,000
Tchula lake	1881		12,000	3,000	15,000
Yalobusha	1881		11,000		11,000
Tallahatchie	1879	6,000	26,000	5,000	37,000
Total for tributaries	1879	33,000	85,000	23,000	141,000
Total for Yazoo	1873	107,000	83,000	25,000	215,000
Total for Yazoo and tributaries	1873	140,000	168,000	48,000	356,000
Washita and Black	1871	243,000	93,500	15,000	351,500
Little Missouri, of Arkansas	1871	20,000			20,000
Tensas	1881		16,000	5,000	21,000
Saline	1880		21,500		21,500
Total for Washita, Black, and tributaries	1871	263,000	131,000	20,000	414,000
Red	1828	1,183,265	440,000	102,000	1,725,265
Tributaries:					
Little, of Louisiana	1888		2,500	3,000	5,500
Caney via Little	1884		2,500		2,500
Total for tributaries	1884		5,000	3,000	8,000
Total for Red	1828	1,183,265	440,000	102,000	1,725,265
Total for Red and tributaries	1828	1,183,265	445,000	105,000	1,733,265
Total for Lower Mississippi system	1827	4,604,677	15,916,125	3,734,200	24,255,002
RED RIVER OF THE NORTH.					
Total	1876	65,000	128,000	25,000	218,000
MISCELLANEOUS.					
Construction of snag and dredge boats	1852	846,000			846,000
Surveys	1819	286,000			286,000
Surveys and estimates of canal from Cumberland to mouth of Youghiogheny, 1874 and 1875.	1874	210,000			210,000
Total for miscellaneous	1819	1,342,000			1,342,000

TABLE 30.—CONGRESSIONAL APPROPRIATIONS.

STATEMENT BY TOTALS OF THE APPROPRIATIONS GIVEN BY LOCALIZED ITEMS IN THE PRECEDING TABLE.

LOCALITIES.	Date of earliest appropriation.	Appropriations up to and including 1879.	Appropriations from 1880 to 1889, inclusive.	Appropriations by act of Congress, September, 1890.	Total appropriations up to date.
Grand total for the Valley	1819	$28, 200, 707	$39, 290, 556	$9, 336, 200	$76, 827, 463
Upper Mississippi	1836	10, 612, 064	8, 072, 510	2, 067, 000	20, 751, 574
Saint Croix	1878	18, 000	74, 500	8, 000	100, 500
Chippewa	1876	34, 465	128, 750	10, 000	173, 215
Illinois	1852	639, 150	947, 500	2, 000	1, 588, 650
Missouri	1832	1, 489, 000	4, 011, 250	1, 159, 000	6, 659, 250
Total for Upper Mississippi system	1832	12, 792, 679	13, 234, 510	3, 246, 000	29, 273, 189
Ohio	1835	5, 289, 500	3, 226, 813	640, 000	9, 156, 313
Allegheny	1879	10, 000	222, 500	20, 000	252, 500
Monongahela	1872	187, 000	411, 233	176, 000	774, 233
Muskingum	1879	30, 000	389, 500	30, 000	449, 500
Little Kanawha	1876	43, 300	127, 875	40, 000	211, 175
Great Kanawha	1873	1, 002, 500	1, 371, 500	305, 500	2, 679, 500
Big Sandy	1878	24, 000	241, 500	36, 000	301, 500
Kentucky	1879	100, 000	1, 067, 000	180, 000	1, 347, 000
Green	1888	....	135, 000	25, 000	160, 000
Wabash	1829	346, 500	401, 000	65, 500	813, 000
Cumberland	1832	491, 000	596, 000	292, 500	1, 379, 500
Tennessee	1827	1, 872, 551	1, 822, 000	520, 500	4, 215, 051
Total for Ohio system	1827	9, 396, 351	10, 011, 921	2, 331, 000	21, 739, 272
Lower Mississippi	1827	2, 212, 412	14, 461, 850	3, 318, 700	19, 992, 962
White	1872	188, 500	231, 400	42, 000	461, 900
Arkansas	1832	617, 500	478, 875	200, 500	1, 296, 875
Yazoo	1873	140, 000	168, 000	48, 000	356, 000
Washita	1871	263, 000	131, 000	20, 000	414, 000
Red	1828	1, 183, 265	445, 000	105, 000	1, 733, 265
Total for Lower Mississippi system	1827	4, 604, 677	15, 916, 125	3, 734, 200	24, 255, 002
Red River of the North	1876	65, 000	128, 000	25, 000	218, 000
Miscellaneous	1819	1, 342, 000	....	....	1, 342, 000

TABLE 31.—NAVIGABLE WATERS.

NUMBER OF NAVIGABLE MILES ON THE RIVERS OF THE MISSISSIPPI VALLEY AND NUMBER OF MILES OVER WHICH A TRANSPORTATION BUSINESS WAS CONDUCTED IN 1889.

LOCALITIES.	Miles of operated rivers in 1889.	Miles of navigable rivers in 1889.
Grand total for the Valley	14,266	15,410
Total for Upper Mississippi system	4,103	4,486
Total for Ohio system	4,178	4,406
Total for Lower Mississippi system	5,695	6,228
Total for Red River of the North	290	290
UPPER MISSISSIPPI SYSTEM.		
Upper Mississippi:		
Headwaters to Saint Louis	870	870
Tributaries:		
Galena	....	6
Fox and Wisconsin	....	62
Minnesota	25	25
Hennepin canal	....	....
Cuivre	....	15
Total for tributaries	25	108
Total for Upper Mississippi	870	870
Total for Upper Mississippi and tributaries	895	978
Saint Croix	120	120
Chippewa	57	57
Illinois	225	225
Missouri:		
Headwaters to Saint Louis	2,519	2,519
Tributaries:		
Osage	200	200
Gasconade	87	87
Yellowstone	....	300
Total for tributaries	287	587
Total for the Missouri	2,519	2,519
Total for Missouri and tributaries	2,806	3,106
Total for Upper Mississippi system	4,103	4,486
OHIO SYSTEM.		
Ohio:		
Pittsburg to the mouth	967	967
Tributaries:		
Guyandotte	80	80
Licking	90	90
Tradewater	22	22
Total for tributaries	192	192
Total for the Ohio	967	967
Total for Ohio and tributaries	1,159	1,159
Allegheny	180	180
Monongahela	102	102
Cheat	....	90
Buckhannon	48	48
Total for Monongahela and tributaries	150	240
Muskingum	91	91
Little Kanawha	49	49
Great Kanawha	96	96
Elk	45	45
Gauley	27	27
Total for Great Kanawha and tributaries	168	168

LOCALITIES.	Miles of operated rivers in 1889.	Miles of navigable rivers in 1889.
OHIO SYSTEM—Continued.		
Big Sandy	26	26
Tug fork	100	100
Levisa fork	86	86
Total for Big Sandy and tributaries	212	212
Kentucky	261	261
Green	150	150
Rough creek (or Barren)	25	25
Total for Green and tributaries	175	175
Wabash	183	183
White, of Indiana	27	27
Total for Wabash and tributaries	210	210
Cumberland:		
Headwaters to mouth	578	578
Tributaries:		
Obey	....	58
Caney fork	92	92
Total for tributaries	92	150
Total for Cumberland	578	578
Total for Cumberland and tributaries	670	728
Tennessee:		
Headwaters to mouth	650	650
Tributaries:		
Duck	....	67
Clinch	70	70
Hiwassee	43	43
French Broad, of Tennessee	90	90
Little Tennessee	....	13
Total for tributaries	203	283
Total for the Tennessee	650	650
Total for Tennessee and tributaries	853	933
Total for Ohio system	4,178	4,406
LOWER MISSISSIPPI SYSTEM.		
Lower Mississippi:		
From Saint Louis to head of passes	1,264	1,264
Bayous:		
Bartholomew	85	85
Black	....	14
Bœuf	261	261
Courtableau	25	25
D'Arbonne	43	43
Lafourche	110	110
Loggy	....	....
Pierre	60	60
Teche	....	80
Terrebonne	46	46
Steels	85	85
Cypress	....	65
Total for bayous	715	874
Tributaries:		
Forked Deer, south fork of	....	10
Saint Francis and Cache creek, via White	285	285
Big Black	....	65
Big Hatchie	....	100
L'Anguille via Saint Francis	38	38

TABLE 31.—NAVIGABLE WATERS—Continued.

NUMBER OF NAVIGABLE MILES ON THE RIVERS OF THE MISSISSIPPI VALLEY, ETC.—Continued.

LOCALITIES.	Miles of operated rivers in 1889.	Miles of navigable rivers in 1889.
LOWER MISSISSIPPI SYSTEM—Continued.		
Lower Mississippi tributaries—Continued.		
Kaskaskia	....	24
Little, of Missouri, via Saint Francis	85	85
Total for tributaries	408	607
Total for bayous	715	874
Total for Lower Mississippi	1, 264	1, 264
Total for Lower Mississippi, bayous, and tributaries.	2, 387	2, 745
White, of Arkansas	300	300
Tributaries:		
Current	....	....
Black, of Missouri	100	100
Little Red	90	90
Total for tributaries	190	190
Total for White	300	300
Total for White and tributaries	490	490
Arkansas:		
Headwaters to mouth	771	771
Tributaries:		
Fourche la Fave	44	44
Petit Jean	45	45
Total for tributaries	89	89
Total for the Arkansas	771	771
Total for Arkansas and tributaries	860	860
LOWER MISSISSIPPI SYSTEM—Continued.		
Yazoo	173	173
Tributaries:		
Big Sunflower	144	144
Coldwater	25	25
Tchula lake	....	60
Yalobusha	....	90
Tallahatchie	100	100
Total for tributaries	269	419
Total for Yazoo	173	173
Total for Yazoo and tributaries	442	592
Washita and Black	306	306
Tributaries:		
Little Missouri, of Arkansas	....	....
Tensas and Macon	130	130
Saline	80	80
Total for tributaries	210	210
Total for Washita and Black	306	306
Total for Washita, Black, and tributaries	516	516
Red:		
Headwaters to mouth	1, 000	1, 000
Tributaries:		
Little, of Louisiana	....	25
Total for tributaries	....	25
Total for Red	1, 000	1, 000
Total for Red and tributaries	1, 000	1, 025
Total for Lower Mississippi system	5, 695	6, 228
RED RIVER OF THE NORTH.		
Total	290	290

TRANSPORTATION ON CANALS AND CANALIZED RIVERS.

TRANSPORTATION ON CANALS AND CANALIZED RIVERS.

BY THOMAS J. VIVIAN.

The report made on canals for the Tenth Census treated so fully of their history that nothing more need be said upon that branch of the subject than will be found in the comparative statistics of 1880 and 1889, given herewith. The present Report on Canals and Canalized Rivers has been made to conform as nearly as possible with those on transportation on the coasts, lakes, and rivers. The figures are grouped under the heads of "Construction", "Floating Equipment", "Traffic", "Income and Expenditures", and "Comparative Statistics", the plan of the tables being as follows:

PLAN OF THE TABLES.

Table 1.—Construction—Number of canals and canalized rivers, their dimensions, with date and cost of construction.
Table 2.—Floating equipment—Number, tonnage, and valuation of canal boats, with averages of tonnage and valuation.
Table 3.—Traffic—Freight carried on canals and canalized rivers.
Table 4.—Income and expenditures—Gross earnings, expenses, and net earnings of canals.
Table 5.—Comparative statistics—Operated mileage in 1880 and 1889.
Table 6.—Comparative statistics—Abandoned canals.
Table 7.—Comparative statistics—Traffic in 1880 and 1889.
Table 8.—Comparative statistics—Income and expenditures in 1880 and 1889.

The statistics of construction, equipment, traffic, and of income and expenditures are given for each reporting canal and by state totals, with segregations of the construction and traffic figures for state and corporation canals, United States government canals, and canalized rivers. By state canals is meant those works which are the property of the state in which they are located; by corporation canals is meant those works which belong to private parties or to companies. The United States government canals are those which were either built by the federal government or have become its property by purchase. By canalized rivers is meant those portions of watercourses which have been rendered navigable or whose navigation has been improved by the construction of locks and other works, with resulting slackwater.

Most of the state and corporation canals are used only for the transportation of freight in canal boats. Some of them, such as those used in Louisiana to connect the various bayous, are purely ship canals. The United States government canals are all ship canals, and the canalized rivers are grouped as such. The number and mileage of ship canals, including canalized rivers, are given in the accompanying summary:

TABLE A.—SUMMARY SHOWING THE NUMBER AND MILEAGE OF SHIP CANALS OF THE UNITED STATES.

CANALS AND CANALIZED RIVERS.	Number.	Mileage.
Total	48	1,479.63
State and corporation canals	18	360.96
United States canals	9	40.63
Canalized rivers	21	1,078.04

In Table 1 the ownership of each state and corporation canal is shown, the following statement giving these facts in condensed form:

TABLE **B.**—STATEMENT SHOWING THE OWNERSHIP OF STATE AND CORPORATION CANALS.

STATES.	Owned by states. (Miles.)	Owned by corporations. (Miles.)
Total	1,320.66	943.94
New York	560.66	86.00
New Jersey		171.02
Pennsylvania		464.98
Delaware		14.00
Maryland		15.00
Virginia		67.44
North Carolina		13.00
Georgia		25.00
Florida		10.50
Louisiana		38.25
Texas		38.00
Ohio	658.00	
Illinois	102.00	
Oregon		0.75

The ownership of the United States government canals is indicated in the title. In the case of the canalized rivers the ownership is that of the public works whose construction has resulted in the mileage of slackwater navigation set opposite each improved stream. These facts are condensed as follows:

TABLE **C.**—STATEMENT SHOWING THE OWNERSHIP OF THE PUBLIC WORKS ON CANALIZED RIVERS, WITH THE MILEAGE OF THE RESULTING SLACKWATER NAVIGATION.

STATES.	Owned by states. (Miles.)	Owned by corporations. (Miles.)	Owned by United States government. (Miles.)
Total	165.20	131.00	781.84
Maine	7.00		
New York	70.20		
Pennsylvania		91.00	23.00
Virginia			11.50
West Virginia		40.00	58.00
Ohio			75.00
Illinois	88.00		139.00
Iowa			4.40
Wisconsin			169.40
Kentucky			286.50
Tennessee			14.40
Alabama			0.04
Oregon			0.60

The term "construction", referred to in the preceding plan of the tables, is used to include the number of works operated, length in miles, the number of locks, and the cost and date of original construction and of improvement, the totals of these statistics being given in the subjoined statement:

TABLE **D.**—SUMMARY SHOWING THE OPERATED MILEAGE, NUMBER OF LOCKS, AND COST OF CANALS AND CANALIZED RIVERS.

CANALS AND CANALIZED RIVERS.	Number.	OPERATED MILEAGE.			Number of locks.	Cost of construction and improvement.
		Total.	Canals.	Canalized rivers.		
Total	67	3,383.27	2,305.23	1,078.04	1,097	$188,185,880
State and corporation canals	37	2,264.60	2,264.60		982	150,481,825
United States canals	9	40.63	40.63		26	20,517,133
Canalized rivers	21	1,078.04		1,078.04	89	17,186,922

The floating equipment of canals, that is, the boats which can be considered as belonging to and as employed exclusively on canals, is here limited to state and corporation canals. The bulk of the equipment is made up of towed boats, although there is a slowly growing fleet of steamboats which are used chiefly as an experiment in motive power. The number, gross tonnage, and estimated valuation of both classes of canal boats are given in the accompanying summary:

TABLE **E.**—SUMMARY SHOWING NUMBER, TONNAGE, AND VALUATION OF CANAL BOATS.

CANAL BOATS.	Number.	Tonnage.	Valuation.
Towed	6, 376	964, 509	$5, 300, 914
Steam	138	14, 676	453, 000

The transportation movement on canals is now confined to that of freight, the amount in tons carried on all canals in the year of report being 48,668,325. The proportion of freight carried on state and corporation canals or United States government canals and on canalized rivers is shown in the following summary:

TABLE **F.**—SUMMARY SHOWING THE NUMBER OF TONS OF FREIGHT CARRIED ON CANALS AND CANALIZED RIVERS.

	TONS.
Total	48, 668, 325
State and corporation canals	13, 269, 600
United States government canals	28, 507, 069
Canalized rivers	6, 891, 656

While the amount of freight carried on the United States government canals and on canalized rivers is included in the reports of the lakes and rivers, it also forms a constituent of the canal traffic of the country. The figures are therefore given here, but are not included in the total for the United States except in the lake and river trade. A portion of the freight moved on state and corporation canals has also been originally reported elsewhere and has been similarly treated, the freight actually carried on canal boats and not reported elsewhere amounting to 10,504,896 tons. The distribution of this duplicated tonnage according to the localities of original report is shown in the following table:

TABLE **G.**—STATEMENT OF FREIGHT MOVED ON CANALS, BUT ORIGINALLY REPORTED IN OTHER DIVISIONS OF TRANSPORTATION ON WATER.

CANALS AND CANALIZED RIVERS.	Where originally reported.	Freight moved. (Tons.)	
Total			38, 163, 429
State and corporation canals	Atlantic coast and Gulf of Mexico	2, 728, 014	2, 764, 704
	Pacific coast	36, 690	
United States government canals	Great lakes	27, 491, 869	28, 507, 069
	Mississippi valley	1, 015, 200	
Canalized rivers	Great lakes	346, 475	6, 891, 656
	Mississippi valley	6, 545, 181	

The gross earnings, expenses, and net earnings, which make up the table entitled "Income and Expenditures", are only those of the state and corporation canals, neither the United States government canals nor the canalized rivers reporting any income and expense account; for, while it is a fact that both of the latter waterways require an expenditure for their maintenance, the amount so laid out is from appropriations by the United States, and the receipts from tolls form an income account which can not be considered that of transportation. The gross income of state and corporation canals amounted to $4,089,132.26, the sources being either tolls or lockage. The expenditures amounted to $2,122,376, and were made up of the maintenance of waterways and structure, wages, provisions, fuel, and keep of stock. The net income stood at $1,966,756.26.

The 4 tables of comparative statistics show the variations of operated mileage, the extent of traffic, and the income and expenditures for the 2 years 1880 and 1889 and the mileage of abandoned canals. A comparison of mileage shows that the total operated mileage in 1880 was 3,235.78 and in 1889 3,383.27, an increase of 147.49 miles. This increased mileage is in the United States government canals and canalized rivers, the mileage of the state and corporation canals having decreased, as shown in the summary on the following page.

TABLE **H.**—STATEMENT SHOWING THE INCREASE OR DECREASE IN THE OPERATED MILEAGE OF CANALS IN 1880 AND 1889.

CANALS AND CANALIZED RIVERS.	1880	1889	Increase.	Decrease.
State and corporation canals	2,746.18	2,264.60		481.58
United States government canals	10.00	40.63	30.63	
Canalized rivers	479.60	1,078.04	598.44	
Total	3,235.78	3,383.27	629.07	481.58
Net increase			147.49	

The decreased mileage is nearly all that of state and corporation canals given up between 1880 and 1889 as shown in Table 6. The abandoned mileage and works are as follows:

	MILES.
Total mileage of abandoned canals between 1880 and 1889	261.69
Parts of the Erie canal	13.68
Parts of the Pennsylvania canal	140.00
Union canal	84.64
Alexandria and Georgetown canal	7.12
Parts of the Ohio canal	6.00
Parts of the Miami and Erie canal	10.25

The other changes which brought about the decrease of the 481.58 miles of state and corporation canals are these: the Black River canal in 1880 contained 42.50 miles of slackwater, which is now placed with the canalized river mileage; the Chesapeake and Ohio canal was washed out in 1889 and was not reopened until 1892; the St. Mary Falls canal, 1.02 miles, and the Lake Superior canal, 2.12 miles, were reported in 1880 as state and corporation canals, but in this report they are classed with the United States government canals. These decreases were offset by the extension of the Company's canal in Louisiana from 12 miles to 22.25 miles, and by the increase in the mileage of the United States government canals and in that of canalized rivers shown in detail in Table 5.

No report of equipment was made for canals in the Tenth Census, so that a comparison in that branch of the subject is not possible.

The freight traffic of the canals and canalized rivers reported to the Tenth and Eleventh censuses is shown in Table 7, the figures being summarized as follows:

TABLE **I.**—SUMMARY SHOWING THE FREIGHT TRAFFIC OF CANALS AND CANALIZED RIVERS OF THE UNITED STATES AS REPORTED IN 1880 AND 1889.

CANALS AND CANALIZED RIVERS.	1880 (Tons.)	1889 (Tons.)
Total	21,044,292	48,668,325
State and corporation canals	17,548,602	13,269,600
United States government canals		28,507,069
Canalized rivers	3,495,690	6,891,656

The decrease in the amount of freight carried on state and corporation canals in 1889, as compared with that carried in 1880, is due to the decrease of mileage by abandonment and temporary disuse of canals referred to in preceding paragraphs. The increase in the amount of freight carried on canalized rivers in 1889 over that of 1880 is due to the larger exploitation of this class of artificial waterway, and in 1880 no report was made of the freight passing through United States government canals.

In Table 8 will be found the statistics of income and expenditures as reported at the Tenth and Eleventh censuses, and from that table the following summary is derived:

TABLE **J.**—SUMMARY SHOWING THE GROSS INCOME AND EXPENDITURES OF CANALS OF THE UNITED STATES IN 1880 AND 1889.

ITEMS.	1880	1889
Gross income	$4,302,185.00	$4,089,132.26
Expenditures	2,875,335.00	2,122,376.00
Net income	1,426,850.00	1,966,756.26

In order to secure a closer presentation of the comparative business done and financial returns by canals in 1880 and 1889, Tables 7 and 8 have been prepared in such a way as to show the mileage for which these statistics were reported in both 1880 and 1889, that for which they were reported in either 1880 or 1889, and mileage for which no business was reported in either of these years.

The mileage in Tables 5 and 7 includes certain United States government canals and canalized rivers existing in 1880 that were not reported in the Tenth Census. The names and mileage are as follows:

TABLE K.—STATEMENT SHOWING THE UNITED STATES GOVERNMENT CANALS AND CANALIZED RIVERS EXISTING IN 1880 THAT WERE NOT REPORTED AT THE TENTH CENSUS.

	MILES.
United States government canals	10.00
Des Moines Rapids, Iowa	7.60
Louisville and Portland, Kentucky	2.40
Canalized rivers	299.60
Songo, Maine	7.00
Seneca, New York	7.70
Beaver, Pennsylvania	6.00
Upper Appomattox, Virginia	11.50
Great Kanawha, West Virginia	58.00
Little Kanawha, West Virginia	40.00
Fox, Wisconsin	160.40
Chippewa, Wisconsin	9.00

Table 8 is for canals only; the mileage includes the United States government canals existing in 1880 that were not reported in the Tenth Census, namely:

	MILES.
Total	10.00
Des Moines Rapids	7.60
Louisville and Portland	2.40

TABLE 1.—CONSTRUCTION—NUMBER, DIMENSIONS, DATE OF CONSTRUCTION, AND COST OF STATE

SUMMARY.

	CANALS AND CANALIZED RIVERS.
1	Total
2	State and corporation canals
3	United States government canals
4	Canalized rivers

A.—STATE AND CORPORATION CANALS.

	STATES.	Canals.	Points connected.	When built.
1	Total			
2	New York			
3		Erie and branches (*a*)	Albany–Buffalo	1817–1825
4		Oswego (*a*)	Oswego–Syracuse	1825–1828
5		Cayuga and Seneca (*a*)	Montezuma–Cayuga and Seneca lakes	1825–1839
6		Champlain (*a*)	Whitehall–Waterford	1817–1822
7		Black River (*a*)	Rome–Lyons Falls	1836–1849
8		Delaware and Hudson	Rondout–Pennsylvania state line	1826–1828
9	New Jersey			
10		Delaware and Raritan (*b*) Delaware and Raritan Feeder	New Brunswick–Bordentown Bull Island–Trenton	1834–1838
11		Morris	Jersey City–Easton, Pa	1825–1836
12		Penn's Neck (*b*)	Salem creek–Delaware river	1800–1872
13	Pennsylvania			
14		Pennsylvania	Columbia–Duncan Island Clark Ferry–Northumberland Northumberland–Wilkesbarre Junction–Huntingdon Northumberland–Flemington	1826–1839
15		Delaware and Hudson (see New York)	Honesdale–New York state line	1826–1828
16		Susquehanna and Tidewater	Columbia–Maryland state line	1837–1840
17		Schuylkill Navigation Company	Mill creek–Philadelphia	1816–1826
18		Lehigh Coal and Navigation Company Delaware division	Coalport–Easton Easton–Bristol	1819–1821 1830
19		Muncy	Muncy–Pennsylvania canal	
20	Delaware	Chesapeake and Delaware (*b*)	Delaware city, Del.–Chesapeake city, Md	1829
21	Maryland	Susquehanna and Tidewater (see Pennsylvania)	Havre de Grace–Pennsylvania state line	1837–1840
22	Virginia			
23		Albemarle and Chesapeake (*b*)	Norfolk–North Carolina state line	1855–1860
24		Dismal Swamp (*b*)	Elizabeth river, Va.–Pasquotank river, N. C	1787–1794
25	North Carolina			
26		Fairfield (*b*)	Alligator river–Mattamuskeet lake	1868
27		Newberne and Beaufort (*b*)	Clubfoot creek–Newport river	1880–1882
28		Albemarle and Chesapeake (see Virginia) (*b*)	Canjock bay–North river	1855–1860
29	Georgia			
30		Augusta (*b*)	Savannah river–Augusta	1847
31		Ogeechee	Savannah river–Ogeechee river	1829–1840
32	Florida	Santa Fe (*b*)	Waldo–Melrose	1877–1880
33	Louisiana			
34		New Basin (*b*)	New Orleans–Lake Ponchartrain	1832–1835
35		Old Basin (Carondelet) (*b*)	New Orleans–Bayou St. John	1794
36		Harvey's (*b*)	Harvey–Bayou Barataria	1830
37		Company's (*b*)	Mississippi river–Bayou Black	1832–1847
38		Secolas (Tagliaferro) (*b*)	Mississippi river–Bayou Barataria	1880–1881
39	Texas	Galveston and Brazos (*b*)	Galveston–Brazos river	1850–1851
40	Ohio			
41		Ohio and branches (*a*)	Cleveland–Portsmouth	1825–1835
42		Walhonding (*a*)	Rochester–Roscoe	1836–1843
43		Hocking (*a*)	Carroll–Nelsonville	1838–1843
44		Miami and Erie (*a*)	Cincinnati–Toledo	1825–1835
45	Illinois	Illinois and Michigan (*a*) (*b*)	Chicago–Lasalle	1836–1848
46	Oregon	Willamette Transportation and Lock Company (*b*)	Willamette river, around falls at Oregon city	1873

a State canal.

AND CORPORATION CANALS, UNITED STATES GOVERNMENT CANALS, AND CANALIZED RIVERS.

SUMMARY.

CANALS AND CANALIZED RIVERS.											
Length.			Width.		Depth. (Feet.)	Locks.				Cost of construction and improvement.	
Total. (Miles.)	Canal. (Miles.)	Slackwater. (Miles.)	Surface. (Feet.)	Bottom. (Feet).		Number.	Length. (Feet.)	Width. (Feet.)	Rise and fall. (Feet.)		
3,383.27	2,132.59	1,250.68				1,097				$188,185,880	1
2,264.60	2,091.96	172.64				982				150,481,825	2
40.63	40.63					26				20,517,133	3
1,078.04		1,078.04				89				17,186,922	4

A.—STATE AND CORPORATION CANALS.

LENGTH.			WIDTH.		Depth. (Feet.)	LOCKS.				Cost of construction and improvement.	
Total. (Miles.)	Canal. (Miles.)	Slackwater. (Miles.)	Surface. (Feet.)	Bottom. (Feet.)		Number.	Length. (Feet.)	Width. (Feet.)	Rise and fall. (Feet.)		
2,264.60	2,091.96	172.64				982				$150,481,825	1
646.66	594.07	52.59				349				73,978,122	2
381.39	351.80	29.59	70	52½	7	72	110	18	656.46	52,540,800	3
38.00	18.00	20.00	70	56	7	18	110	18	155.55	5,239,526	4
24.77	24.77		70	56	7	11	110	18	76.58	2,232,632	5
81.00	81.00		58	44	6	32	110	18	179.50	4,044,000	6
35.50	35.50		42	28	4	109	90	15	1,080.00	3,581,954	7
86.00	83.00	3.00	48	32	6	107	100	15	1,028.00	6,339,210	8
171.02	171.02					47				10,929,749	9
66.00	66.00		60–80		6–7	14	220	24	150.00	4,888,749	10
103.00	103.00		45	25	5	33	88	20	1,674.00	6,030,000	11
2.02	2.02		100	75	5					41,000	12
464.98	414.93	50.05				264				32,020,122	13
193.00	193.00		40–100	25–32	4½–6	71	85–180	14–17	132.00 68.00 68.00 255.00 123.00	7,731,750	14
25.00	25.00										15
30.00	30.00		50	30	5½	32	170	17	230.00	4,931,345	16
108.23	58.18	50.05	60	40	6¼	71	110	18	619.00	12,461,600	17
108.00	108.00		44–60	26–45	6	90	90–100	11–22	375.00 165.00	6,888,350	18
0.75	0.75		40	25	4½					7,077	19
14.00	14.00		66		[illegible]	3	220	24	32.00	3,730,230	20
15.00	15.00										21
67.44	36.44	31.00				8				2,792,363	22
38.44	8.44	30.00	80	60	7½	1	220	40	2.00	1,641,363	23
29.00	28.00	1.00	40–60		6	7	100	16½	35.00	1,151,000	24
13.00	13.00									400,000	25
4.50	4.50		40		6					200,000	26
3.00	3.00		80		10					200,000	27
5.50	5.50										28
25.00	25.00					5				1,907,818	29
9.00	9.00		150		11					1,500,000	30
16.00	16.00		120		3	5				407,818	31
10.50	10.50		35		5					70,000	32
38.25	29.25	9.00				6				2,015,000	33
6.50	6.50		85		7					1,000,000	34
2.00	2.00		60		7					750,000	35
5.75	5.75		45		6	3	200	35		150,000	36
22.25	13.25	9.00	40		6	1	117	25		90,000	37
1.75	1.75		30		4	2	110	20		25,000	38
38.00	8.00	30.00	50		3½					340,000	39
658.00	658.00					280				14,340,634	40
317.00	317.00		40	26	4	150	90	15	1,207.00	4,695,204	41
25.00	25.00		40		4	11	90	15	90.00	607,269	42
42.00	42.00		40		4	26	87	15	203.00	975,481	43
274.00	274.00		50–60		5½	93	87–99	15	907.00	8,062,680	44
102.00	102.00				6	15			141.00	7,357,787	45
0.75	0.75				9	5	210	40	39.75	600,030	46

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b Ship canal.

TABLE 1.—CONSTRUCTION—NUMBER, DIMENSIONS, DATE OF CONSTRUCTION, AND COST OF STATE AND

B.—UNITED STATES GOVERNMENT CANALS.

	STATES.	Canals and canalized rivers.	Points connected.	When built.
1	Total			
2	Michigan			
3		St. Mary Falls (*a*) (*b*)	St. Mary river, around the falls	1853–1855
4		Lake Superior (*a*) (*b*)	Portage lake–Lake Superior	1868–1873
5		Keweenaw Bay and Portage Lake (*a*) (*b*)	Keweenaw bay–Portage lake	
6		St. Clair Flats (*a*)	St. Clair river–Lake St. Clair	1866–1889
7	Iowa	Des Moines Rapids (*a*)	Keokuk–Nashville	1868–1877
8	Alabama	Coosa (*a*)	Coosa river, around Ten Island shoals	1879–1888
9	Kentucky	Louisville and Portland (*a*)	Louisville–Portland	1828–1830
10	Tennessee			
11		Muscle Shoals (*a*) Elk River Shoals (*a*)	Tennessee river, around Muscle shoals Tennessee river, around Elk river shoals	1872–1889 1889

C.—CANALIZED RIVERS.

	STATES.	Canals and canalized rivers.	Points connected.	When built.
1	Total			
2	Maine	Songo (*c*)	Sebago lake–Long Pond	
3	New York			
4		Black (*c*)	Carthage–Lyons Falls	1857–1861
5		Oneida (*c*)	Three River Point–Brewerton	1839–1850
6		Seneca (*c*)	Mud Lock–Baldwinsville	
7	Pennsylvania			
8		Monongahela	Pittsburg, Pa.–Morgantown, W. Va	1838–1888
9		Ohio (*f*)	Ohio river, at Davis island	1878–1885
10		Beaver (*g*)	Beaver–Economy	
11	Virginia	Upper Appomattox (*f*)	Stony Point–Petersburg	
12	West Virginia			
13		Great Kanawha (*f*)	Loup Creek shoals–Point Pleasant	1873–1889
14		Little Kanawha (*g*)	Burning Springs–Parkersburg	1870–1889
15	Ohio	Muskingum (*f*)	Zanesville–Marietta	1840
16	Illinois	Illinois	Lasalle–Grafton	1868–1889
17	Iowa	Mississippi (Des Moines Rapids) (*f*)	Nashville–Montrose	1868–1889
18	Wisconsin			
19		Fox (*f*)	Portage city–Green Bay	1860–1889
20		Chippewa (*f*)	Eauclaire–Mississippi river	1876–1889
21	Kentucky			
22		Kentucky (*f*)	Oregon–Ohio river	1845–1889
23		Green and Barren (*f*)	Lock No. 1, Green river–Lock No. 1, Barren river	1880–1889
24		Big Sandy (*f*)	Paintsville–Louisa	1883–1889
25	Tennessee	Cumberland (*f*)	Nashville–Point above Nashville	1887–1889
26	Alabama	Black Warrior (*f*)	Daniel creek–Tuscaloosa	1887–1889
27	Oregon	Columbia (*f*)	Columbia river, at the Cascades	1879–1889

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a Ship canal.
b Purchased by or transferred to the United States government, since the Tenth Census.
c Operated by the state.
d Cost of construction not separable from that of the Black River canal.
e Eighty-five miles owned by a company, 17 miles by the United States government.

CORPORATION CANALS, UNITED STATES GOVERNMENT CANALS, AND CANALIZED RIVERS—Continued.

B.—UNITED STATES GOVERNMENT CANALS.

LENGTH.			WIDTH.		Depth. (Feet.)	LOCKS.				Cost of construction and improvement.	
Total. (Miles.)	Canal. (Miles.)	Slackwater. (Miles.)	Surface. (Feet.)	Bottom. (Feet.)		Number.	Length. (Feet.)	Width. (Feet.)	Rise and fall. (Feet.)		
40.63	40.63					26				$20,517,133	1
9.33	9.33					7				9,008,534	2
1.02	1.02				17	1 1	515 800	80 100		3,996,736	3
2.12	2.12				14					3,985,787	4
5.00	5.00				14	5				181,311	5
1.19	1.19				16					844,700	6
7.60	7.60				5	3	325	80		4,582,009	7
5.30	5.30				3	3	210	40		519,671	8
2.40	2.40				12	2	335	80		3,250,000	9
16.00	16.00					11				3,156,919	10
14.50 1.50	14.50 1.50				6 6	11	300	60		3,156,919	11

C.—CANALIZED RIVERS.

Total. (Miles.)	Canal. (Miles.)	Slackwater. (Miles.)	Surface. (Feet.)	Bottom. (Feet.)	Depth. (Feet.)	Number.	Length. (Feet.)	Width. (Feet.)	Rise and fall. (Feet.)	Cost of construction and improvement.	
1,078.04		1,078.04				89				17,186,922	1
7.00		7.00			10	1	96	24		20,000	2
70.20		70.20				4				368,164	3
42.50		42.50			4	2	142	30		(*d*)	4
20.00		20.00			4	2	120	30½		368,164	5
7.70		7.70			4						6
114.00		114.00				12				3,212,836	7
*e*102.00		102.00			[illegible]	9	160	50		2,283,836	8
6.00		6.00			6	1	600	110		910,000	9
6.00		6.00				2	104	25		19,000	10
11.50		11.50			2½	5	60	90		388,617	11
98.00		98.00				12				2,444,339	12
58.00		58.00			7	5 2	270 311	50 55		2,046,775	13
40.00		40.00			5	5	127	26		397,564	14
75.00		75.00				10	160	36		2,033,724	15
*h*227.00		227.00			7	3	350	75		1,727,297	16
4.40		4.40			5					(*i*)	17
169.40		169.40				28				3,219,701	18
160.40		160.40			4–6	27	160	35		3,063,653	19
9.00		9.00			4–5	1	270	40		156,048	20
286.50		286.50				11				2,079,670	21
98.00		98.00			5	5	149	38		1,163,077	22
175.00		175.00			3	5	145	36		674,294	23
13.50		13.50			5	1	160	52		242,299	24
14.40		14.40			4	1	280	52		69,563	25
0.04		0.04			[illegible]	1	322	52		188,165	26
0.60		0.60			8	1	462	90		1,434,846	27

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f Operated by the United States government.
g Operated by a company.
h Eighty-eight miles owned by the state, 139 miles by the United States government.
i Cost of construction not separable from that of the Des Moines Rapids canal.

TABLE 2.—FLOATING EQUIPMENT—NUMBER, TONNAGE, AND VALUATION OF CANAL BOATS, WITH AVERAGES OF TONNAGE AND VALUATION.

STATES.	Canals.	TOW CANAL BOATS.					STEAM CANAL BOATS.				
		Number.	Tonnage.	Average tonnage.	Valuation.	Average valuation.	Number.	Tonnage.	Average tonnage.	Valuation.	Average valuation.
Total		6,376	964,509	151	$5,300,914	$831	138	14,676	106	$453,000	$3,283
New York		3,557	619,003	174	4,073,400	1,145	96	11,208	117	328,100	3,418
	Erie and branches Oswego Cayuga and Seneca	1,743	406,061	233	2,403,500	1,379	96	11,208	117	328,100	3,418
	Champlain	954	97,597	102	893,450	937					
	Black River	110	10,345	94	94,950	863					
	Delaware and Hudson	750	105,000	140	681,500	909					
New Jersey		314	24,120	77	92,275	294					
	Delaware and Raritan (a)										
	Morris	314	24,120	77	92,275	294					
	Penn's Neck (a)										
Pennsylvania		2,134	286,315	134	960,378	450	1	100	100	2,000	2,000
	Pennsylvania	318	89,040	280	166,314	523	1	100	100	2,000	2,000
	Delaware and Hudson (see New York)										
	Susquehanna and Tidewater	418	54,340	130	218,614	523					
	Schuylkill Navigation Company	125	22,000	176	66,250	530					
	Lehigh Coal and Navigation Company	1,273	120,935	95	509,200	400					
Delaware	Chesapeake and Delaware (a)										
Maryland	Susquehanna and Tidewater (see Pennsylvania).										
Virginia	Albemarle and Chesapeake (a)										
	Dismal Swamp (a)										
North Carolina	Fairfield (a)										
	Newberne and Beaufort (a)										
	Albemarle and Chesapeake (a)										
Georgia		25	1,000	40	10,000	400					
	Augusta (a)										
	Ogeechee	25	1,000	40	10,000	400					
Florida	Santa Fe (a)										
Louisiana	New Basin (a)										
	Old Basin (Carondelet) (a)										
	Harvey's (a)										
	Company's (a)										
	Secolas (Tagliaferro) (a)										
Texas	Galveston and Brazos (a)										
Ohio		275	22,000	80	82,500	300	8	640	80	14,400	1,800
	Ohio and branches Walhonding Hocking Miami and Erie	275	22,000	80	82,500	300	8	640	80	14,400	1,800
Illinois	Illinois and Michigan (a)	71	12,071	170	82,361	1,160	33	2,728	83	108,500	3,288
Oregon	Willamette Transportation and Lock Company. (a)										

(a) Ship canal.

TABLE 3.—TRAFFIC—TONS OF FREIGHT CARRIED ON STATE AND CORPORATION CANALS, UNITED STATES GOVERNMENT CANALS, AND CANALIZED RIVERS.

SUMMARY.

	TONS.
Total	48, 668, 325
State and corporation canals	13, 269, 600
United States government canals	28, 507, 069
Canalized rivers	6, 891, 656

A.—STATE AND CORPORATION CANALS.

STATES.	Canals and canalized rivers.	Freight traffic. (Tons.)
Total		13, 269, 600
New York		6, 816, 304
	Erie and branches	3, 673, 554
	Oswego	170, 078
	Cayuga and Seneca	196, 138
	Champlain	1, 187, 038
	Black River	143, 561
	Delaware and Hudson	1, 445, 935
New Jersey		1, 738, 905
	Delaware and Raritan (*a*)	1, 276, 269
	Morris	462, 636
	Penn's Neck (*a*)	
Pennsylvania		1, 359, 665
	Pennsylvania	423, 073
	Delaware and Hudson (see New York)	
	Susquehanna and Tidewater	125, 555
	Schuylkill Navigation Company	219, 697
	Lehigh Coal and Navigation Company	591, 340
	Muncy	
Delaware	Chesapeake and Delaware (*a*)	736, 879
Maryland	Susquehanna and Tidewater (see Pennsylvania)	
Virginia		395, 004
	Albemarle and Chesapeake (*a*)	316, 793
	Dismal Swamp (*a*)	78, 211
North Carolina		2, 124
	Fairfield (*a*)	2, 124
	Newberne and Beaufort (*a*)	
	Albemarle and Chesapeake (see Virginia) (*a*)	
Georgia		40, 392
	Augusta (*a*)	23, 668
	Ogeechee	16, 724
Florida	Santa Fe (*a*)	1, 000
Louisiana		293, 070
	New Basin (*a*)	226, 594
	Old Basin (Carondelet) (*a*)	66, 476
	Harvey's (*a*)	
	Company's (*a*)	
	Secolas (Tagliaferro) (*a*)	
Texas	Galveston and Brazos (*a*)	
Ohio		1, 107, 176
	Ohio and branches	129, 398
	Walhonding	948
	Hocking	7, 353
	Miami and Erie	969, 477
Illinois	Illinois and Michigan (*a*)	742, 391
Oregon	Willamette Transportation and Lock Company. (*a*)	36, 690

B.—UNITED STATES GOVERNMENT CANALS.

STATES.	Canals and canalized rivers.	Freight traffic. (Tons.)
Total		28, 507, 069
Michigan		27, 491, 869
	St. Mary Falls (*a*)	7, 516, 022
	Lake Superior (*a*)	8, 284
	Keweenaw Bay and Portage Lake (*a*)	249, 703
	St. Clair Flats (*a*)	19, 717, 860
Iowa	Des Moines Rapids (*a*)	397, 140
Alabama	Coosa (*a*)	
Kentucky	Louisville and Portland (*a*)	618, 060
Tennessee		
	Muscle Shoals (*a*)	
	Elk River Shoals (*a*)	

C.—CANALIZED RIVERS.

STATES.	Canals and canalized rivers.	Freight traffic. (Tons.)
Total		6, 891, 656
Maine	Songo	
New York		
	Black	
	Oneida	
	Seneca	
Pennsylvania		3, 294, 932
	Monongahela	3, 294, 932
	Ohio	
	Beaver	
Virginia	Upper Appomattox	
West Virginia		1, 260, 859
	Great Kanawha	1, 145, 202
	Little Kanawha	115, 657
Ohio	Muskingum	10, 281
Illinois	Illinois	180, 264
Iowa	Mississippi (Des Moines Rapids)	397, 140
Wisconsin		671, 952
	Fox	346, 475
	Chippewa	325, 477
Kentucky		1, 076, 228
	Kentucky	256, 950
	Green and Barren	819, 278
	Big Sandy	
Tennessee	Cumberland	
Alabama	Black Warrior	
Oregon	Columbia	

a Ship canal.

TABLE 4.—INCOME AND EXPENDITURES—GROSS EARNINGS, EXPENSES, AND NET EARNINGS OF CANALS. (*a*)

STATES.	Canals.	Gross earnings.	Expenses.	Net earnings.	Net loss.
Total		$4,089,132.26	$2,122,376.00	$1,966,756.26	
New York		916,884.83	1,037,824.33		$120,939.50
	Erie and branches	857,297.86	786,257.86	71,040.00	
	Oswego				
	Cayuga and Seneca				
	Champlain				
	Black River				
	Delaware and Hudson	59,586.97	251,566.47		191,979.50
New Jersey		335,239.81	301,635.25	33,604.56	
	Delaware and Raritan (*b*)				
	Morris	335,239.81	301,635.25	33,604.56	
	Penn's Neck (*b*)				
Pennsylvania		2,430,829.04	476,169.34	1,954,659.70	
	Pennsylvania	172,342.19	228,808.99		56,466.80
	Delaware and Hudson (see New York)				
	Susquehanna and Tidewater	18,189.30	88,897.55		70,708.25
	Schuylkill Navigation Company	102,010.38	43,309.18	58,701.20	
	Lehigh Coal and Navigation Company	2,138,287.17	115,153.62	2,023,133.55	
	Muncy				
Delaware		189,117.61	51,786.38	137,331.23	
	Chesapeake and Delaware (*b*)	189,117.61	51,786.38	137,331.23	
Maryland	Susquehanna and Tidewater (see Pennsylvania)				
Virginia	Albemarle and Chesapeake (*b*)				
	Dismal Swamp (*b*)				
North Carolina	Fairfield (*b*)				
	Newberne and Beaufort (*b*)				
	Albemarle and Chesapeake (see Virginia) (*b*)				
Georgia		5,000.00	5,500.00		500.00
	Augusta (*b*)				
	Ogeechee	5,000.00	5,500.00		500.00
Florida	Santa Fe (*b*)				
Louisiana	New Basin (*b*)				
	Old Basin (Carondelet) (*b*)				
	Harvey's (*b*)				
	Company's (*b*)				
	Secolas (Tagliaferro) (*b*)				
Texas	Galveston and Brazos (*b*)				
Ohio		110,987.46	163,981.75		52,994.29
	Ohio and branches	28,005.47	88,519.30		60,513.83
	Walhonding	892.12	890.15	1.97	
	Hocking	2,613.15	6,219.11		3,605.96
	Miami and Erie	79,476.72	68,353.19	11,123.53	
Illinois		101,073.51	85,478.95	15,594.56	
	Illinois and Michigan (*b*)	101,073.51	85,478.95	15,594.56	
Oregon	Willamette Transportation and Lock Company (*b*)				

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a The figures given are only for state and corporation canals, neither the United States government canals nor the canalized rivers reporting income or expenditure.

b Ship canal.

TABLE 5.—COMPARATIVE STATISTICS—MILEAGE OPERATED IN 1880 AND 1889 BY STATE AND CORPORATION CANALS, UNITED STATES GOVERNMENT CANALS, AND CANALIZED RIVERS.

SUMMARY.

CANALS AND CANALIZED RIVERS.	Miles operated in 1889 (including slack-water).	Miles operated in 1880 (including slack-water).	Increase.	Decrease.
Total	3,383.27	3,235.78	147.49	
State and corporation canals	2,264.60	2,746.18		481.58
United States government canals	40.63	10.00	30.63	
Canalized rivers	1,078.04	479.60	598.44	

A.—STATE AND CORPORATION CANALS.

STATES.	Canals.	Miles operated in 1889 (including slack-water).	Miles operated in 1880 (including slack-water).	Increase.	Decrease.
Total		2,264.60	2,746.18		481.58
New York		616.66	702.84		56.18
	Erie and branches	381.39	395.07		13.68
	Oswego	38.00	38.00		
	Cayuga and Seneca	24.77	24.77		
	Champlain	81.00	81.00		
	Black River	35.50	78.00		42.50
	Delaware and Hudson	86.00	86.00		
New Jersey		171.02	171.02		
	Delaware and Raritan (*a*)	66.00	66.00		
	Morris	103.00	103.00		
	Penn's Neck (*a*)	2.02	2.02		
Pennsylvania		464.98	689.62		224.64
	Pennsylvania	193.00	333.00		140.00
	Delaware and Hudson	25.00	25.00		
	Susquehanna and Tidewater.	30.00	30.00		
	Union		84.64		84.64
	Schuylkill Navigation Company.	108.23	108.23		
	Lehigh Coal and Navigation Company.	108.00	108.00		
	Muncy	0.75	0.75		
Delaware	Chesapeake and Delaware. (*a*)	14.00	14.00		
Maryland		15.00	199.50		184.50
	Chesapeake and Ohio	(*b*)	184.50		184.50
	Susquehanna and Tidewater.	15.00	15.00		
Virginia		67.44	74.56		7.12
	Albemarle and Chesapeake. (*a*)	38.44	38.44		
	Dismal Swamp (*a*)	29.00	29.00		
	Alexandria and Georgetown.		7.12		7.12
North Carolina		13.00	13.00		
	Fairfield (*a*)	4.50	4.50		
	Newberne and Beaufort. (*a*)	3.00	3.00		
	Albemarle and Chesapeake. (*a*)	5.50	5.50		
Georgia		25.00	25.00		
	Augusta (*a*)	9.00	9.00		
	Ogeechee	16.00	16.00		
Florida	Santa Fe (*a*)	10.50	10.50		
Louisiana		38.25	28.00	10.25	
	New Basin (*a*)	6.50	6.50		
	Old Basin (Carondelet) (*a*)	2.00	2.00		
	Harvey's (*a*)	5.75	5.75		
	Company's (*a*)	22.25	12.00	10.25	
	Secolas (Tagliaferro) (*a*)	1.75	1.75		
Texas	Galveston and Brazos (*a*)	38.00	38.00		
Ohio		658.00	674.25		16.25
	Ohio and branches	317.00	323.00		6.00
	Walhonding	25.00	25.00		
	Hocking	42.00	42.00		
	Miami and Erie	274.00	284.25		10.25
Illinois	Illinois and Michigan (*a*)	102.00	102.00		
Oregon	Willamette Transportation and Lock Company. (*a*)	0.75	0.75		
Michigan			3.14		3.14
	St. Mary Falls (*a*)		1.02		1.02
	Lake Superior (*a*)		2.12		2.12

B.—UNITED STATES GOVERNMENT CANALS.

STATES.	Canals.	Miles operated in 1889 (including slack-water).	Miles operated in 1880 (including slack-water).	Increase.	Decrease.
Total		40.63	10.00	30.63	
Michigan		9.33		9.33	
	St. Mary Falls (*a*)	1.02		1.02	
	Lake Superior (*a*)	2.12		2.12	
	Keweenaw Bay and Portage Lake. (*a*)	5.00		5.00	
	St. Clair Flats (*a*)	1.19		1.19	
Iowa	Des Moines Rapids (*a*)	7.60	7.60		
Alabama	Coosa (*a*)	5.30		5.30	
Kentucky	Louisville and Portland. (*a*)	2.40	2.40		
Tennessee		16.00		16.00	
	Muscle Shoals (*a*)	14.50		14.50	
	Elk River Shoals (*a*)	1.50		1.50	

a Ship canal.

b Rendered useless in 1889 by the floods of June of that year.

TABLE 5.—COMPARATIVE STATISTICS—MILEAGE OPERATED IN 1880 AND 1889 BY STATE AND CORPORATION CANALS, UNITED STATES GOVERNMENT CANALS, AND CANALIZED RIVERS—Continued.

C.—CANALIZED RIVERS.

STATES.	Canalized rivers.	Miles operated in 1889 (including slack-water.)	Miles operated in 1880 (including slack-water.)	Increase.	Decrease.
Total		1,078.04	479.60	598.44	
Maine	Songo	7.00	7.00		
New York		70.20	27.70	42.50	
	Black	42.50		42.50	
	Oneida	20.00	20.00		
	Seneca	7.70	7.70		
Pennsylvania		114.00	91.00	23.00	
	Monongahela	102.00	85.00	17.00	
	Ohio (Davis island)	6.00		6.00	
	Beaver	6.00	6.00		
Virginia	Upper Appomattox	11.50	11.50		
West Virginia		98.00	98.00		
	Great Kanawha	58.00	58.00		
	Little Kanawha	40.00	40.00		
Ohio	Muskingum	75.00	75.00		
Illinois	Illinois	227.00		227.00	
Iowa	Mississippi (Des Moines rapids).	4.40		4.40	
Wisconsin		169.40	169.40		
	Fox	160.40	160.40		
	Chippewa	9.00	9.00		
Kentucky		286.50		286.50	
	Kentucky	98.00		98.00	
	Green and Barren	175.00		175.00	
	Big Sandy	13.50		13.50	
Tennessee	Cumberland	14.40		14.40	
Alabama	Black Warrior	0.04		0.04	
Oregon	Columbia (at Cascades)	0.60		0.60	

TABLE 6.—COMPARATIVE STATISTICS—LENGTH AND COST OF ABANDONED CANALS UP TO 1880 AND FROM 1880 TO 1889.

STATES.	Canals.	Length. (Miles.)	Cost of construction.
Total up to 1889		2,215.25	$51,171,016
Total up to 1880		1,953.56	44,013,166
Total 1880 to 1889		261.69	7,157,850
New York	Erie and branches (part)	13.68	
Pennsylvania		224.64	5,907,850
	Pennsylvania (part)	140.00	
	Union	84.64	5,907,850
Virginia	Alexandria and Georgetown	7.12	1,250,000
Ohio		16.25	
	Ohio and branches (part)	6.00	
	Miami and Erie (part)	10.25	

TABLE 7.—COMPARATIVE STATISTICS—FREIGHT TRAFFIC IN 1880 AND 1889.

SUMMARY.

CANALS AND CANALIZED RIVERS—	MILES (INCLUDING SLACKWATER).				FREIGHT TRAFFIC (TONS).			
	1889	1880	Increase.	Decrease.	1889	1880	Increase.	Decrease.
Total	3,383.27	3,235.78	147.49		48,668,325	21,044,292	27,624,033	
Reporting freight traffic in 1880 and 1889	2,356.83	2,552.26		195.43	16,537,123	18,978,971		2,441,848
Reporting freight traffic in 1880 or 1889	805.15	570.82	234.33		32,131,202	2,065,321	30,065,881	
Not reporting in either 1880 or 1889	221.29	112.70	108.59					

A.—CANALS AND CANALIZED RIVERS REPORTING FREIGHT TRAFFIC IN 1880 AND 1889.

STATES.	Canals and canalized rivers.	MILES (INCLUDING SLACKWATER).				FREIGHT TRAFFIC (TONS).			
		1889	1880	Increase.	Decrease.	1889	1880	Increase.	Decrease.
Total		2,356.83	2,552.26		195.43	16,537,123	18,978,971		2,441,848
New York	State and corporation canals	646.66	702.84		56.18	6,816,304	7,766,969		950,665
	Erie and branches	381.39	395.07		13.68	3,673,554	4,608,651		935,097
	Oswego	38.00	38.00			170,078	427,863		257,785
	Cayuga and Seneca	24.77	24.77			196,138	125,331	70,807	
	Champlain	81.00	81.00			1,187,038	1,200,503		13,465
	Black River	35.50	78.00		42.50	143,561	75,308	68,253	
	Delaware and Hudson	86.00	86.00			1,445,935	1,329,313	116,622	
New Jersey	State and corporation canals	169.00	169.00			1,738,905	1,851,568		112,663
	Delaware and Raritan (*a*)	66.00	66.00			1,276,269	1,348,082		71,813
	Morris	103.00	103.00			462,636	503,486		40,850
Pennsylvania		566.23	689.23		123.00	4,654,597	6,024,247		1,369,650
	State and corporation canals	464.23	604.23		140.00	1,359,665	2,573,847		1,214,182
	Pennsylvania	193.00	333.00		140.00	423,073	861,798		438,725
	Susquehanna and Tidewater	30.00	30.00			125,555	362,295		236,740
	Schuylkill Navigation Company	108.23	108.23			219,697	630,416		410,719
	Lehigh Coal and Navigation Company	108.00	108.00			591,340	719,338		127,998
	Delaware and Hudson (see New York)	25.00	25.00						
	Canalized rivers:								
	Monongahela	102.00	85.00	17.00		3,294,932	3,450,400		155,468
Delaware	State and corporation canals:								
	Chesapeake and Delaware (*a*)	14.00	14.00			736,879	959,146		222,267
Maryland	State and corporation canals:								
	Susquehanna and Tidewater (see Pennsylvania)	15.00	15.00						
Virginia	State and corporation canals	67.44	67.44			595,004	406,731		11,727
	Albemarle and Chesapeake (*a*)	38.44	38.44			316,793	400,000		83,207
	Dismal Swamp (*a*)	29.00	29.00			78,211	6,731	71,480	
North Carolina	State and corporation canals	10.00	10.00			2,124	40,000		37,876
	Albemarle and Chesapeake (see Virginia) (*a*)	5.50	5.50						
	Fairfield (*a*)	4.50	4.50			2,124	40,000		37,876
Georgia	State and corporation canals	25.00	25.00			40,392	23,602	16,790	
	Augusta (*a*)	9.00	9.00			23,668	2,697	20,971	
	Ogeechee	16.00	16.00			16,724	20,905		4,181
Louisiana	State and corporation canals	8.50	8.50			293,070	318,096		25,026
	New Basin (*a*)	6.50	6.50			226,594	177,108	49,486	
	Old Basin (Carondelet) (*a*)	2.00	2.00			66,476	140,988		74,512
Ohio		733.00	749.25		16.25	1,117,457	837,252	280,205	
	State and corporation canals	658.00	674 25		16.25	1,107,176	791,962	315,214	
	Ohio and branches	317.00	323.00		6.00	129,398	429,626		300,228
	Walhonding	25.00	25.00			948	3,309		2,361
	Hocking	42.00	42.00			7,353	35,290		27,937
	Miami and Erie	274.00	284.25		10.25	969,477	323,737	645,740	
	Canalized rivers:								
	Muskingum	75.00	75.00			10,281	45,290		35,009
Illinois	State and corporation canals:								
	Illinois and Michigan (*a*)	102.00	102.00			742,391	751,360		8,969

a Ship canal.

TABLE 7.—COMPARATIVE STATISTICS—FREIGHT TRAFFIC IN 1880 AND 1889—Continued.

B.—CANALS AND CANALIZED RIVERS REPORTING FREIGHT TRAFFIC IN 1880 OR 1889.

STATES.	Canals and canalized rivers.	MILES (INCLUDING SLACKWATER).				FREIGHT TRAFFIC (TONS).			
		1889	1880	Increase.	Decrease.	1889	1880	Increase.	Decrease.
Total		805.15	570.82	234.33		32,131,202	2,065,321	30,065,881	
New Jersey	State and corporation canals:								
	Penn's Neck (*a*)	2.02	2.02				6,000		6,000
Pennsylvania	State and corporation canals	0.75	85.39		84.64		33,688		33,688
	Union		84.64		84.64		29,853		29,853
	Muncy	0.75	0.75				3,835		3,835
Maryland	State and corporation canals:								
	Chesapeake and Ohio	(*b*)	184.50		184.50		655,423		655,423
Virginia	State and corporation canals:								
	Alexandria and Georgetown		7.12		7.12		125,931		125,931
West Virginia	Canalized rivers	98.00	98.00			1,260,859		1,260,859	
	Great Kanawha	58.00	58.00			1,145,202		1,145,202	
	Little Kanawha	40.00	40.00			115,657		115,657	
Kentucky		275.40	2.40	273.00		1,694,288		1,694,288	
	United States government canals:								
	Louisville and Portland (*a*)	2.40	2.40			618,060		618,060	
	Canalized rivers	273.00		273.00		1,076,228		1,076,228	
	Kentucky	98.00		98.00		256,950		256,950	
	Green and Barren	175.00		175.00		819,278		819,278	
Iowa		12.00	7.60	4.40		794,280		794,280	
	United States government canals:								
	Des Moines Rapids (*a*)	7.60	7.60			397,140		397,140	
	Canalized rivers:								
	Mississippi (Des Moines rapids)	4.40		4.40		397,140		397,140	
Michigan		9.33	3.14	6.19		27,491,869	1,244,279	26,247,590	
	State and corporation canals		3.14		3.14		1,244,279		1,244,279
	St. Mary Falls (*a*)		1.02		1.02		1,244,279		1,244,279
	Lake Superior (*a*)		2.12		2.12				
	United States government canals	9.33		9.33		27,491,869		27,491,869	
	St. Mary Falls (*a*)	1.02		1.02		7,516,022		7,516,022	
	Lake Superior (*a*)	2.12		2.12		8,284		8,284	
	Keweenaw Bay and Portage Lake (*a*)	5.00		5.00		249,703		249,703	
	St. Clair Flats (*a*)	1.19		1.19		19,717,860		19,717,860	
Illinois	Canalized rivers:								
	Illinois	227.00		227.00		180,264		180,264	
Wisconsin	Canalized rivers	169.40	169.40			671,952		671,952	
	Fox	160.40	160.40			346,475		346,475	
	Chippewa	9.00	9.00			325,477		325,477	
Florida	State and corporation canals:								
	Santa Fe (*a*)	10.50	10.50			1,000		1,000	
Oregon	State and corporation canals:								
	Willamette Transportation and Lock Company (*a*)	0.75	0.75			36,690		36,690	

a Ship canal.

b Rendered useless in 1889 by the floods of June of that year.

TABLE 7.—COMPARATIVE STATISTICS—FREIGHT TRAFFIC IN 1880 AND 1889—Continued.

C.—CANALS AND CANALIZED RIVERS NOT REPORTING FREIGHT TRAFFIC IN EITHER 1880 OR 1889.

STATES.	Canals and canalized rivers.	MILES (INCLUDING SLACKWATER).				FREIGHT TRAFFIC (TONS).			
		1889	1880	Increase.	Decrease.	1889	1880	Increase.	Decrease.
Total		221.29	112.70	108.59					
Maine	Canalized rivers: Songo	7.00	7.00						
New York	Canalized rivers	70.20	27.70	42.50					
	Black	42.50		42.50					
	Oneida	20.00	20.00						
	Seneca	7.70	7.70						
Pennsylvania	Canalized rivers	12.00	6.00	6.00					
	Ohio (Davis island)	6.00		6.00					
	Beaver	6.00	6.00						
Virginia	Canalized rivers: Upper Appomattox	11.50	11.50						
North Carolina	State and corporation canals: Newberne and Beaufort (*a*)	3.00	3.00						
Louisiana	State and corporation canals:	29.75	19.50	10.25					
	Harvey's(*a*)	5.75	5.75						
	Company's(*a*)	22.25	12.00	10.25					
	Secolas (Tagliaferro) (*a*)	1.75	1.75						
Texas	State and corporation canals: Galveston and Brazos (*a*)	38.00	38.00						
Alabama		5.34		5.34					
	United States government canals: Coosa (*a*)	5.30		5.30					
	Canalized rivers: Black Warrior	0.04		0.04					
Tennessee		30.40		30.40					
	United States government canals	16.00		16.00					
	Muscle Shoals (*a*)	14.50		14.50					
	Elk River Shoals (*a*)	1.50		1.50					
	Canalized rivers: Cumberland	14.40		14.40					
Kentucky	Canalized rivers: Big Sandy	13.50		13.50					
Oregon	Canalized rivers: Columbia	0.60		0.60					

a Ship canal.

TABLE 8.—COMPARATIVE STATISTICS—INCOME

SUMMARY.

	CANALS—	MILES (INCLUDING SLACKWATER). 1889	1880	Increase.	Decrease.
1	Total	2,305.23	2,756.18		450.95
2	Reporting income and expenditures in 1880 and 1889	1,902.39	2,072.32		169.93
3	Reporting income and expenditures in 1880 or 1889	339.58	648.09		308.51
4	Not reporting income and expenditures in either 1880 or 1889	63.26	35.77	27.49	

A.—CANALS REPORTING INCOME AND EXPENDITURES IN 1880 AND 1889.

	STATES.	Canals.	MILES (INCLUDING SLACKWATER). 1889	1880	Increase.	Decrease.
1	Total		1,902.39	2,072.32		169.93
2	New York		530.16	543.84		13.68
3		Erie and branches Oswego Cayuga and Seneca	381.39 38.00 24.77	395.07 38.00 24.77		13.68
4		Delaware and Hudson	86.00	86.00		
5	New Jersey	Morris	103.00	103.00		
6	Pennsylvania		464.23	604.23		140.00
7		Pennsylvania	193.00	333.00		140.00
8		Susquehanna and Tidewater	30.00	30.00		
9		Schuylkill Navigation Company	108.23	108.23		
10		Lehigh Coal and Navigation Company	108.00	108.00		
11		Delaware and Hudson	25.00	25.00		
12	Delaware	Chesapeake and Delaware (*a*)	14.00	14.00		
13	Maryland	Susquehanna and Tidewater	15.00	15.00		
14	Georgia	Ogeechee	16.00	16.00		
15	Ohio		658.00	674.25		16.25
16		Ohio and branches Walhonding Hocking Miami and Erie	317.00 25.00 42.00 274.00	323.00 25.00 42.00 284.25		6.00 10.25
17	Illinois	Illinois and Michigan (*a*)	102.00	102.00		

B.—CANALS REPORTING INCOME AND EXPENDITURES IN 1880 OR 1889.

	STATES.	Canals.	MILES (INCLUDING SLACKWATER). 1889	1880	Increase.	Decrease.
1	Total		339.58	648.09		308.51
2	New York		116.50	159.00		42.50
3		Champlain	81.00	81.00		
4		Black River	35.50	78.00		42.50
5	New Jersey	Delaware and Raritan (*a*)	66.00	66.00		
6	Pennsylvania		0.75	85.39		84.64
7		Union		84.64		84.64
8		Muncy	0.75	0.75		
9	Maryland	Chesapeake and Ohio	(*b*)	184.50		184.50
10	Virginia		67.44	74.56		7.12
11		Albemarle and Chesapeake (*a*)	38.44	38.44		
12		Dismal Swamp (*a*)	29.00	29.00		
13		Alexandria and Georgetown		7.12		7.12
14	North Carolina		10.00	10.00		
15		Fairfield (*a*)	4.50	4.50		
16		Albemarle and Chesapeake (see Virginia) (*a*)	5.50	5.50		
17	Georgia	Augusta (*a*)	9.00	9.00		
18	Louisiana		28.75	18.50	10.25	
19		New Basin (*a*)	6.50	6.50		
20		Company's (*a*)	22.25	12.00	10.25	
21	Texas	Galveston and Brazos (*a*)	38.00	38.00		
22	Michigan		3.14	3.14		
23		St. Mary Falls (*a*)	1.02	1.02		
24		Lake Superior (*a*)	2.12	2.12		

a Ship canal.

AND EXPENDITURES IN 1880 AND 1889.

SUMMARY.

1889				1880				
Gross earnings.	Expenses.	Net earnings.	Net loss.	Gross earnings.	Expenses.	Net earnings.	Net loss.	
$4,089,132.26	$2,122,376.00	$1,966,756.26		$4,302,185.00	$2,875,335.00	$1,426,850.00		1
4,089,132.26	2,122,376.00	1,966,756.26		3,202,148.00	1,977,636.00	1,224,512.00		2
				1,100,037.00	897,699.00	202,338.00		3
								4

A.—CANALS REPORTING INCOME AND EXPENDITURES IN 1880 AND 1889.

1889				1880				
Gross earnings.	Expenses.	Net earnings.	Net loss.	Gross earnings.	Expenses.	Net earnings.	Net loss.	
$4,089,132.26	$2,122,376.00	$1,966,756.26		$3,202,148.00	$1,977,636.00	$1,224,512.00		1
916,884.83	1,037,824.33		$120,939.50	1,176,111.00	912,061.00	264,050.00		2
857,297.86	786,257.86	71,040.00		1,136,611.00	727,789.00	408,822.00		3
59,586.97	251,566.47		191,979.50	39,500.00	184,272.00		$144,772.00	4
335,239.81	301,635.25	33,604.56		215,677.00	160,418.00	55,259.00		5
2,430,829.04	476,169.34	1,954,659.70		1,298,017.00	505,924.00	792,093.00		6
172,342.19	228,808.99		56,466.80	368,770.00	177,826.00	190,944.00		7
18,189.30	88,897.55		70,708.25	55,260.00	35,979.00	19,281.00		8
102,010.38	43,309.18	58,701.20		573,133.00	169,952.00	403,181.00		9
2,138,287.17	115,153.62	2,023,133.55		300,854.00	122,167.00	178,687.00		10
								11
189,117.61	51,786.38	137,331.23		201,783.00	62,245.00	139,538.00		12
								13
5,000.00	5,500.00		500.00	7,300.00	6,980.00	320.00		14
110,987.46	163,981.75		52,994.29	195,655.00	204,407.00		8,752.00	15
110,987.46	163,981.75		52,994.29	195,655.00	204,407.00		8,752.00	16
101,073.51	85,478.95	15,594.56		107,605.00	125,601.00		17,996.00	17

B.—CANALS REPORTING INCOME AND EXPENDITURES IN 1880 OR 1889.

				1,100,037	897,699	202,338		1
				63,067	187,913		124,846	2
				51,267	136,520		85,253	3
				11,800	51,393		39,593	4
				419,431	331,344	88,087		5
				27,072	22,515	4,557		6
				26,997	22,496	4,501		7
				75	19	56		8
				372,616	227,277	145,339		9
				104,048	71,632	32,416		10
				86,138	56,432	29,706		11
				13,524	6,000	7,524		12
				4,386	9,200		4,814	13
				8,000	3,000	5,000		14
				8,000	3,000	5,000		15
								16
				20,909	7,382	13,527		17
				27,840	13,650	14,190		18
				20,340	13,650	6,690		19
				7,500		7,500		20
				4,535	3,454	1,081		21
				52,519	29,532	22,987		22
				44,743	23,437	21,306		23
				7,776	6,095	1,681		24

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b Rendered useless in 1889 by the floods of June of that year.

TABLE 8.—COMPARATIVE STATISTICS—INCOME AND EXPENDITURES IN 1880 AND 1889—Continued.

C.—CANALS NOT REPORTING INCOME AND EXPENDITURES IN EITHER 1880 OR 1889.

STATES.	Canals.	MILES (INCLUDING SLACKWATER).			
		1889	1880	Increase.	Decrease.
Total		63.26	35.77	27.49	
New Jersey	Penn's Neck (*a*)	2.02	2.02		
North Carolina	Newberne and Beaufort (*a*)	3.00	3.00		
Florida	Santa Fe (*a*)	10.50	10.50		
Louisiana		9.50	9.50		
	Old Basin (Carondelet) (*a*)	2.00	2.00		
	Harvey's (*a*)	5.75	5.75		
	Secolas (Tagliaferro) (*a*)	1.75	1.75		
Oregon	Willamette Transportation and Lock Company (*a*)	0.75	0.75		
Michigan		6.19		6.19	
	Keweenaw Bay and Portage Lake (*a*)	5.00		5.00	
	St. Clair Flats (*a*)	1.19		1.19	
Iowa	Des Moines Rapids (*a*)	7.60	7.60		
Alabama	Coosa (*a*)	5.30		5.30	
Kentucky	Louisville and Portland (*a*)	2.40	2.40		
Tennessee		16.00		16.00	
	Muscle Shoals (*a*)	14.50		14.50	
	Elk River Shoals (*a*)	1.50		1.50	

a Ship canal.

TRANSPORTATION BY EXPRESS COMPANIES.

TRANSPORTATION BY EXPRESS COMPANIES.

BY THOMAS J. VIVIAN.

The present is the first census report made upon the business of the express companies of the country. It was the intent to include the express business in the Tenth Census, but the law was found inadequate in the circumstances, as explained in volume IV, of the report of the census of 1880.

The report for 1890 is the result of more recent legislation and the hearty co-operation of the express companies.

EXISTING AND MERGED COMPANIES.

The express companies from which reports were sought were those which shipped freight over some railroad, stage, or water line of the United States, in charge of their agents or messengers, and whose business was not confined to one town. From those express companies which were in existence during the years 1880 to 1889, inclusive, material was gathered for a table showing the mileage operated by them during that period.

In the following parallel columns there are given the lists of those companies which were in operation during the year ending June 30, 1890, and those companies which, during the decade 1880–1889, inclusive, were either discontinued or absorbed into other similar carrying organizations, the facts relative to their discontinuance being given in Table 1:

THE EIGHTEEN EXPRESS COMPANIES OPERATING IN THE UNITED STATES DURING THE YEAR ENDING JUNE 30, 1890.	THE THIRTEEN EXPRESS COMPANIES WHICH LAPSED DURING THE DECADE 1880–1889, INCLUSIVE.
Adams Express Company.	Baltimore and Ohio Express Company.
American Express Company.	Delaware, Lackawanna and Western Express Company.
Camden and Atlantic Express Company.	Erie and New England Express Company.
Canadian Express Company.	Erie Express Company.
Cincinnati, Georgetown and Portsmouth Express Company.	Louisville, New Albany and Chicago Express Company.
Denver and Rio Grande Express.	Ohio and Mississippi Express Company.
Dominion Express Company.	Philadelphia and Reading Express Company.
Earle & Prew's Express.	Pittsburg and Western Express Company.
Long Island Express Company.	St. Louis, Iron Mountain and Southern Express Company.
National Express Company.	Texas Express Company.
New England Despatch Express Company.	Union Express Company.
New York and Boston Despatch Express Company.	United States and Canada Express Company.
Northern Pacific Express Company.	Westcott's Express Company.
Pacific Express Company.	
Southern Express Company.	
United States Express Company.	
Wells, Fargo & Co.'s Express.	
West Jersey Express Company.	

Two foreign companies, the Canadian and Dominion, operate over mileage in the United States. The Dominion Express Company courteously furnished all the information asked for, but the Canadian Express Company furnished only a statement of the mileage operated in the United States during the years 1880–1889, inclusive.

As will be seen by their titles, many of the discontinued companies were operated by the railroads whose names they bear, the attempt to combine the express business with their original occupation as common carriers having been made at one time or another by most of the large railroad organizations, while the other companies have lost their corporate identity through the processes of consolidation. These processes of consolidation have been almost as active among express companies as among railroads. Some of the surviving concerns represent the consolidation of dozens of earlier companies.

PLAN OF THE TABLES.

For the presentation of the statistical results of the investigation by the Eleventh Census into the express industry, the following 6 tables have been prepared:

Table 1.—Mileage operated by express companies during the years 1880–1890, inclusive.
Table 2.—Mileage operated by express companies on June 30, 1890, given by routes.
Table 3.—Equipment and fixtures of express companies on June 30, 1890.
Table 4.—Employés of express companies on June 30, 1890.
Table 5.—Expenditures of express companies for the year ending June 30, 1890.
Table 6.—Business done by the express companies during the year ending June 30, 1890.

The data in all of these tables are presented in 3 parts, as follows:

Part 1.—By companies in each group.
Part 2.—By company totals.
Part 3.—By group totals.

In addition to these segregations all 3 parts of the first 2 tables are subdivided as follows:

A.—Mileage operated over railways.
B.—Mileage operated over water lines.
C.—Mileage operated over stage lines.
D.—Mileage operated over all lines.

GROUPINGS.

The groups are the same as those to which the assignment of railroad data has been made, the express companies having segregated their business done over the various railroad, water, and stage lines which are operated within these groups.

These groups, with the express companies which operate within them, are as follows:

Group I consists of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut. The express companies operating in this group during the years 1880–1890 were:

Adams Express Company.
American Express Company.
Canadian Express Company.
Dominion Express Company.
Earle & Prew's Express.
National Express Company.
New England Despatch Express Company.
New York and Boston Despatch Express Company.
United States and Canada Express Company. (*a*)
United States Express Company.

Group II consists of New Jersey, Delaware, Maryland, District of Columbia, and so much of New York, Pennsylvania, and West Virginia as lies east and north of a line from Buffalo, N. Y., to Salamanca, N. Y.; thence following the county lines to Pittsburg, Pa.; thence following the Ohio river to Parkersburg, W. Va.; thence across West Virginia to the south end of the west boundary of Maryland. The express companies operating in this group during the years 1880–1890 were:

Adams Express Company.
American Express Company.
Baltimore and Ohio Express Company. (*a*)
Camden and Atlantic Express Company.
Delaware, Lackawanna and Western Express Company. (*a*)
Erie Express Company. (*a*)
Erie and New England Express Company. (*a*)
Long Island Express Company.
National Express Company.
Philadelphia and Reading Express Company. (*a*)
Union Express Company. (*a*)
United States Express Company.
United States and Canada Express Company. (*a*)
Wells, Fargo & Co.'s Express.
Westcott's Express Company. (*a*)
West Jersey Express Company.

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a Not in operation in the year ending June 30, 1890.

Group III consists of Ohio and Indiana, the southern peninsula of Michigan, and so much of Pennsylvania and New York as lies west of a line from Pittsburg, Pa., to Buffalo, N. Y., via Salamanca N. Y. The express companies operating in this group at some time during the years 1880–1890 were:

Adams Express Company.
American Express Company.
Baltimore and Ohio Express Company. (*a*)
Canadian Express Company.
Cincinnati, Georgetown and Portsmouth Express Company.
Erie Express Company. (*a*)
Louisville, New Albany and Chicago Express Company. (*a*)
Ohio and Mississippi Express Company. (*a*)
Pacific Express Company.
Pittsburg and Western Express Company. (*a*)
Union Express Company. (*a*)
United States Express Company.
Wells, Fargo & Co.'s Express.

Group IV consists of Virginia, West Virginia (exclusive of that portion in Group II), North Carolina, and South Carolina. The express companies operating in this group during the years 1880–1890 were:

Adams Express Company.
Baltimore and Ohio Express Company. (*a*)
Southern Express Company.
United States Express Company.

Group V consists of Kentucky, Tennessee, Mississippi, Alabama, Georgia, and Florida. The express companies operating in this group during the years 1880–1890 were:

Adams Express Company.
Baltimore and Ohio Express Company. (*a*)
Pacific Express Company.
Southern Express Company.
United States Express Company.

Group VI consists of Illinois, Wisconsin, northern peninsula of Michigan, Minnesota, Iowa, North Dakota and South Dakota east of the Missouri river, and Missouri north of the Missouri river. The express companies operating in this group during the years 1880–1890 were:

Adams Express Company.
American Express Company.
Baltimore and Ohio Express Company. (*a*)
Northern Pacific Express Company.
Ohio and Mississippi Express Company. (*a*)
Pacific Express Company.
Southern Express Company.
United States Express Company.
Wells, Fargo & Co.'s Express.

Group VII consists of Montana, Wyoming, Nebraska, that portion of North Dakota and South Dakota west of the Missouri river, and that portion of Colorado north of the latitude of Denver. The express companies operating in this group during the years 1880–1890 were:

American Express Company.
Northern Pacific Express Company.
Pacific Express Company.
United States Express Company. (*a*)
Wells, Fargo & Co.'s Express.

Group VIII consists of that part of Missouri south of the Missouri river, Arkansas, Kansas, Indian territory, Oklahoma, that part of Colorado south of the latitude of Denver, that portion of New Mexico north of Santa Fe, and that portion of Texas north of a line from Santa Fe to the southwest corner of Indian territory. The express companies operating in this group during the years 1880–1890 were:

Adams Express Company.
American Express Company. (*a*)
Denver and Rio Grande Express.
Pacific Express Company.
St. Louis, Iron Mountain and Southern Express Company. (*a*)
Southern Express Company.
Texas Express Company. (*a*)
United States Express Company.
Wells, Fargo & Co.'s Express.

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a Not in operation in the year ending June 30, 1890.

Group IX consists of Louisiana, Texas (except that portion allotted to Group VIII), and that portion of the territory of New Mexico lying south of a line from Santa Fe eastward to the southwest corner of Indian territory and east of a line from Santa Fe to El Paso. The express companies operating in this group during the years 1880–1890 were:

Baltimore and Ohio Express Company. (*a*)
Pacific Express Company.
Southern Express Company.
Texas Express Company. (*a*)
United States Express Company.
Wells, Fargo & Co.'s Express.

Group X consists of California, Oregon, Nevada, Washington, Idaho, Arizona, Utah, and that portion of New Mexico lying west of a line from Santa Fe to El Paso and south of a line from Santa Fe to the northwestern corner of the territory. The express companies operating in this group during the years 1880–1890 were:

Adams Express Company. (*a*)
Denver and Rio Grande Express.
Northern Pacific Express Company.
Pacific Express Company.
Wells, Fargo & Co.'s Express.

WHAT THE TABLES SHOW.

Tables 1 and 2 deal with the question of mileage operated by express companies, that is, the number of miles of railroads, water lines, and stage lines over which express companies transport goods. Table 1, "Mileage operated by express companies during the years 1880–1890, inclusive", presents these figures for the 11 years 1880 to 1890, inclusive, and gives details for each of the express companies, the figures in gross being set forth in the following summary:

TABLE **A.**—SUMMARY SHOWING THE MILEAGE OPERATED BY EXPRESS COMPANIES OVER RAILROADS, WATER LINES, AND STAGE LINES FROM 1880 TO 1890, INCLUSIVE. (*a*)

YEARS.	Total.	Over railroads.	Over water lines.	Over stage lines.
1880	102, 816. 75	90, 649. 75	7, 036. 00	5, 131. 00
1881	115, 236. 28	102, 614. 28	7, 096. 00	5, 526. 00
1882	126, 393. 01	114, 129. 01	7, 366. 00	4, 898. 00
1883	141, 146. 88	128, 688. 38	8, 393. 50	4, 065. 00
1884	141, 473. 19	128, 801. 69	8, 376. 50	4, 295. 00
1885	145, 179. 64	131, 557. 14	8, 538. 50	5, 084. 00
1886	152, 259. 33	139, 202. 83	8, 689. 50	4, 367. 00
1887	163, 760. 66	151, 271. 16	8, 724. 50	3, 765. 00
1888	167, 628. 00	154, 406. 50	9, 014. 50	4, 207. 00
1889	169, 857. 16	157, 897. 66	8, 207. 50	3, 752. 00
1890	174, 534. 51	160, 597. 51	10, 882. 00	3, 055. 00

a The railroad mileage prior to 1890 and the water lines include an undetermined amount of Canadian mileage. The railroad mileage for 1890 includes 475.18 miles of lines in Canada.

The salient facts of this summary are the steady increase of railroad mileage from year to year, the fluctuations of mileage operated over water lines, and the decrease of that operated over stage lines. In 1880, as will be seen, the mileage operated by express companies over railroads was 90,649.75, while in 1890 it was 160,597.51, including Canadian mileage, an increase of 69,947.76 miles for 10 years. The mileage operated over water lines also shows an increase, but it is by no means as large, the increase for 10 years being 3,846 miles, or 54.66 per cent. In the year of greatest increase the mileage of water lines used by express companies was 10,882 for 1890 against 8,207.50 for 1889, an increase of 2,674.50. This increase was largely through the operation, for the first time by the American Express Company in 1890, of steamship companies plying between Boston and Nova Scotia and of others plying between Detroit, Grand Haven, and Milwaukee; through the operation by the United States Express Company of the Choptank Steamboat Company and a line from Salem to Philadelphia, and an increased operation on the Ohio river by the Adams Express Company.

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a Not in operation in the year ending June 30, 1890.

VARIATIONS OF MILEAGE.

The variations in the account of operated mileage during the 11 years, as given by groups, are quite pronounced and are due to a variety of causes. In the first place it must be understood that the mileage is that operated by express companies and does not stand as the mileage of the various transportation lines. Fluctuations therefore are those of mileage operated by express companies over certain lines and not of the mileage of the transportation lines themselves, and while the routes operated by the express companies as a rule are well defined, changes are being constantly made in the contracts, not only with the transportation lines but also among express companies themselves. In the next place, it will be observed that while there are fluctuations in the mileage operated in the various groups, the total mileage operated over railways by express companies has gradually increased from 1880 to 1890, inclusive. The only group in which this steadiness of increase has been maintained is Group V, while the other 2 groups in which this increase has been most nearly maintained are Groups VIII and IX. The fact that but 8 groups are represented in that part of the summary dealing with the express mileage operated over water lines is not due to the absence of waterways, but simply to the fact that certain companies have found it expedient or necessary to employ other transportation lines than waterways. The drop in 1890, Group V, is due to the abandonment by the Adams Express Company of its river line between Evansville, Paducah, and Cairo. The small mileage drop in Groups VII and VIII was that of ferries not used in 1890, while the drop in the 1889 mileage of Group X is due to the Pacific Express Company's abandonment of 1,135 miles of the Oregon Railway and Navigation Company's water route.

Another point to be mentioned is the extremely large mileage operated over stage lines in Group X as compared with that operated over similar lines in other groups. No better indication is needed than that furnished by these figures of the great extent of country in this group which is still unfurnished with close railroad communication. Even in this group, however, the mileage operated over stage lines is diminishing, and the mileage so operated in 1890 is but little more than half of that operated in 1880.

In Table 2, "Mileage operated by express companies on June 30, 1890, given by routes", the mileage of the census year is analyzed to the extent of the railroad and water lines over which the express companies operated in each group. The railroads quoted are the controlling or operating lines only. The 475.18 miles of Canadian mileage reported in Groups I and III were operated by certain express companies on their international routes for which it was impossible to effect any segregation of returns.

DUPLICATION OF MILEAGE.

One thing remains to be spoken of in connection with the mileage account, that is, the column of duplications or duplicated mileage, which appears in Table 2. These duplications are due to two causes: (1) arrangements by which one express company operating a certain line of railroad agrees to allow some other express company to ship through bills of lading over that line, reserving to itself, however, the exclusive right of local business; (2) contracts between express companies to have the common use of certain portions of railroad lines on a pro rata basis. The duplicated mileage amounted altogether to 5,924.31 miles, so that although the mileage operated on June 30, 1890, by all the express companies over all railroads amounted to 160,597.51 miles, the net railroad mileage operated by these companies amounted only to 154,673.20 miles. The gross, duplicated, and net mileages by groups are shown in the following table:

TABLE B.—SUMMARY SHOWING THE MILEAGE OPERATED OVER RAILROADS BY EXPRESS COMPANIES ON JUNE 30, 1890, THE DUPLICATED MILEAGE, AND THE NET MILEAGE.

GROUPS.	Gross mileage operated by express companies over railroads.	Duplication in the express mileage.	Net mileage operated by express companies.
Total	[a]160,597.51	5,924.31	154,673.20
I	[b]8,815.23	1,953.90	6,861.33
II	18,068.78	646.91	17,421.87
III	[c]21,762.50	1,258.05	20,504.45
IV	8,525.50	51.57	8,473.93
V	16,524.48	1,060.84	15,463.64
VI	37,848.42	745.36	37,103.06
VII	8,785.28		8,785.28
VIII	20,154.54	133.68	20,000.86
IX	9,088.96	54.06	9,034.96
X	11,023.82		11,023.82

[a] Includes 475.18 miles of line in Canada.

[b] Includes 174.88 miles of line in Canada.

[c] Includes 300.30 miles of line in Canada.

EQUIPMENT AND FIXTURES.

The following summary, which is compiled from the figures of Table 3, presents a statement of the equipment and fixtures of each company making report, together with the value placed by the company on these fixtures:

TABLE C.—SUMMARY SHOWING EQUIPMENT AND FIXTURES OF EXPRESS COMPANIES IN THE UNITED STATES ON JUNE 30, 1890.

ITEMS.	Number.	Value.
Total value of equipment and fixtures	....	$5,074,045.12
Cars	35	86,416.39
Office safes	7,670	582,525.03
Messengers' safes	6,910	125,816.70
Messengers' trunks	5,690	62,624.15
Horses	8,291	1,464,476.30
Wagons	6,008	1,192,286.44
Sleighs	1,439	65,595.91
Office fixtures	....	1,146,469.72
Stable equipment (including harness)	....	347,834.48

The significant fact suggested by these figures is that the express business is one which depends upon organization and continuous activity rather than upon an expensive plant.

EMPLOYÉS.

A summary of the information contained in Table 4, "Employés of express companies on June 30, 1890", is as follows:

TABLE D.—SUMMARY SHOWING THE NUMBER OF EMPLOYÉS OF ALL GRADES IN THE SERVICE OF EXPRESS COMPANIES IN THE UNITED STATES ON JUNE 30, 1890.

Total number of employés	45,718
General officers	86
Superintendents and route agents	320
General office clerks	1,377
Agents	21,065
Assistants to agents	7,952
Messengers	4,130
Baggage men employed as messengers	1,405
Drivers of wagons	4,877
All others	4,506

The express business is partly carried on by the employés of the railway companies. Thus the number of baggage men employed as messengers is 1,405 as against 4,130 messengers employed wholly by the express companies. The 21,065 agents returned are entirely within the employ of the companies, as are the superintendents, route agents, office clerks, and drivers.

EXPENDITURES.

The figures given in Table 5, "Expenditures of express companies for the year ending June 30, 1890", include only partial entries for the 4 following railroad express companies: Camden and Atlantic; Cincinnati, Georgetown and Portsmouth; Long Island, and West Jersey, these companies being departments of the railroad corporations owning them and whose names they bear, and having no separately kept expense account. The summarized figures of Table 5 are as follows:

TABLE E.—SUMMARY SHOWING THE EXPENDITURES OF EXPRESS COMPANIES IN THE UNITED STATES FOR THE YEAR ENDING JUNE 30, 1890.

Operating expenses:		
Paid to railways	$19,327,280.49	
Paid to water lines	173,222.13	
Paid to stage lines	60,679.38	
Paid for salaries and wages	16,176,097.55	
Paid for local expenses and repairs	3,560,045.83	
Paid for general expenses	826,715.50	
Paid for other expenses of operation	2,289,663.82	
		$42,413,704.70
Other payments:		
Taxes	171,370.31	
Dividends (8 companies reporting)	3,198,048.31	
		3,369,418.62
Total expenditures		45,783,123.32

It will be seen from this summary that the two great items of expenditure are the amount paid to railways, $19,327,280.49, and that paid out as salaries and wages, $16,176,097.55. In fact, these two items constitute over 80 per cent of the entire expense of operation. During the census year the dividends paid by the 8 companies reporting such payments amounted to $3,198,048.31.

OPERATIONS.

Table 6, "Business done by express companies during the year ending June 30, 1890", is summarized as follows:

TABLE F.—SUMMARY SHOWING THE AMOUNT OF BUSINESS DONE BY EXPRESS COMPANIES IN THE UNITED STATES DURING THE YEAR ENDING JUNE 30, 1890.

Number of freight waybills issued	44, 475, 528
Number of packages carried on freight waybills	98, 118, 430
Weight of packages carried on freight waybills in tons	1, 646, 273
Number of money waybills issued	11, 614, 676
Number of packages carried on money waybills	17, 258, 682
Number of money orders issued	4, 598, 567

Some idea of the minutiæ of the express business may be gathered from the statement here made that the number of packages carried on freight waybills amounted to 98,118,430, for which were issued no fewer than 44,475,528 waybills; and that for the transportation of 17,258,682 money packages no fewer than 11,614,676 waybills were issued. The weight of the packages carried on money waybills is not given, but that of packages carried on the freight waybills was, it will be seen, only 1,646,273 tons, an amount less than that carried by any small and reasonably busy railroad. The money waybills issued include consignments of jewelry, currency, bonds, coupons, and coin. The number of money orders issued, 4,598,567, indicates the condition of a comparatively new extension of the express business.

CONCENTRATION OF CONTROL.

An inspection of the tables will show that in the express business the great bulk is controlled by the following 6 companies: American, Adams, United States, Wells, Fargo & Co.'s, Southern, and Pacific. The standing of these 6 companies is such that in no department of the returns, whether of mileage, equipment, finance, or operations, do they in the aggregate fall below 90 per cent of the entire returns. A comparison between the mileage figures of 1880 and 1890 will show how very decided has been the growth of the controlling power of the few leading companies. In 1880, out of a total of 102,816.75 miles the 6 companies operated 84,653.60, or 82.33 per cent of the whole, but in 1890, out of a total of 174,534.51 the 6 companies operated 161,657, or 92.62 per cent of the whole. These facts are shown in the following summary:

TABLE G.—STATEMENT SHOWING THE MILEAGE OPERATED BY 6 EXPRESS COMPANIES IN 1880 AND 1890, AS COMPARED WITH THAT OPERATED BY ALL OTHER EXPRESS COMPANIES IN THOSE YEARS.

ITEMS.	1880		1890	
	The 6 leading companies.	The 20 other companies.	The 6 leading companies.	The 11 other companies.
Mileage	84, 653. 60	18, 163. 15	161, 657. 00	12, 877. 51
Percentage	82. 33	17. 67	92. 62	7. 38

OWNERSHIP AND ORGANIZATION.

It appears that the express business does not date any further back than 1839, while its earliest date as to an organized undertaking is 1850. This year, it further appears, began the period of greatest activity in express organization, the American Express Company being formed into a joint stock company March, 1850, followed by a similar organization on the part of the United States Express Company April 22, 1854, and by the Adams Express Company July 1, 1854. The record of ownership and organization of the express companies whose statistics appear in this report will be found in the following summary:

TABLE **H.**—STATEMENT OF THE OWNERSHIP AND ORGANIZATION OF EXPRESS COMPANIES OPERATING IN THE UNITED STATES JUNE 30, 1890.

COMPANIES.	Joint stock company or corporation.	Date of organization or charter.	Empowering state.	Number of stockholders or shareholders.	Location of principal office.
Adams Express Company	Joint stock company	July 1, 1854	New York	2,672	New York, N. Y.
American Express Company	do	Mar. 18, 1850	do	3,766	Do.
Camden and Atlantic Express Company (a)					
Cincinnati, Georgetown and Portsmouth Express Company. (b)					
Denver and Rio Grande Express (c)					
Dominion Express Company	Corporation	1873	Canada	20	Montreal, Canada.
Earle & Prew's Express	Joint stock company	Mar. 1, 1868	Rhode Island	2	Providence, R. I.
Long Island Express Company (d)					
National Express Company	Joint stock company	May 1, 1853	New York	70	New York, N. Y.
New England Despatch Express Company	Corporation	Aug. 1, 1885	Massachusetts	10	Boston, Mass.
New York and Boston Despatch Express Company.	do	June 16, 1873	do	1	Do.
Northern Pacific Express Company	do	Aug. 16, 1883	Minnesota	7	St. Paul, Minn.
Pacific Express Company	do	Nov. 1, 1879	Nebraska	11	Omaha, Neb.
Southern Express Company	do	Dec. 21, 1886	Georgia	17	Augusta, Ga.
United States Express Company	Joint stock company	Apr. 22, 1854	New York	(e)	New York, N. Y.
Wells, Fargo & Co.'s Express	Corporation	Feb. 5, 1866	Colorado	1,886	San Francisco, Cal.; New York, N. Y.
West Jersey Express Company (f)					

a Department of the Camden and Atlantic railroad.

b Department of the Cincinnati, Georgetown and Portsmouth railroad.

c Department of the Denver and Rio Grande railroad.

d Department of the Long Island railroad.

e Not reported.

f Department of the West Jersey railroad.

TABLE 1.—MILEAGE OPERATED BY EXPRESS COMPANIES OVER RAILWAYS, WATER LINES, AND STAGE LINES DURING THE YEARS 1880–1890, INCLUSIVE.

[Railroad mileage prior to 1890 and water lines include an undetermined amount of Canadian mileage. Mileage for 1890 includes 475.18 miles of lines in Canada.]

Part 1.—BY COMPANIES IN EACH GROUP.

GROUP I.

A.—MILEAGE OPERATED OVER RAILWAYS.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over railways in Group I.	7,176.97	7,281.40	7,827.78	8,979.37	7,771.50	7,737.90	7,673.94	7,676.41	7,650.37	8,186.74	8,815.23
Adams Express Company	1,334.42	1,424.86	1,428.46	1,429.91	1,449.33	1,439.45	1,442.15	1,442.67	1,619.33	1,617.89	1,464.00
American Express Company	2,034.88	2,048.87	2,416.38	3,521.47	3,903.50	3,856.79	3,790.13	3,792.08	3,561.38	3,655.19	4,997.00
Canadian Express Company	178.44	178.44	178.44	178.44	178.44	178.44	178.44	178.44	178.44	178.44	(a)
Dominion Express Company					20.00	20.00	20.00	20.00	20.00	252.00	252.00
Earle & Prew's Express	201.00	201.00	201.00	245.00	245.00	245.00	245.00	245.00	245.00	245.00	146.00
National Express Company	266.51	266.51	314.23	314.23	457.23	457.22	457.22	457.22	457.22	457.22	430.00
New England Despatch Express Company	1,167.00	1,167.00	1,167.00	1,167.00	1,167.00	1,167.00	1,167.00	1,167.00	1,167.00	1,167.00	887.00
New York and Boston Despatch Express Company.	251.00	251.00	379.00	379.00	351.00	374.00	374.00	374.00	374.00	374.00	399.23
United States Express Company									28.00	240.00	240.00
United States and Canada Express Company.	1,743.72	1,743.72	1,743.27	1,744.32	(b)						

B.—MILEAGE OPERATED OVER WATER LINES.

Total mileage operated over water lines in Group I.	3,195.00	3,255.00	3,545.00	3,392.00	3,352.00	3,417.00	3,417.00	3,343.00	3,594.00	3,864.00	5,026.00
Adams Express Company	153.00	153.09	153.00	125.00	125.00	160.00	160.00	280.00	280.00	280.00	292.00
American Express Company	1,184.00	1,244.00	1,534.00	1,409.00	1,369.00	1,399.00	1,399.00	1,205.00	1,205.00	1,475.00	2,275.00
Earle & Prew's Express	218.00	218.00	218.00	218.00	218.00	218.00	218.00	218.00	218.00	218.00	218.00
New England Despatch Express Company	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00
New York and Boston Despatch Express Company.	233.00	233.00	233.00	233.00	233.00	233.00	233.00	233.00	233.00	233.00	233.00
United States Express Company									251.00	251.00	601.00

C.—MILEAGE OPERATED OVER STAGE LINES.

Total mileage operated over stage lines in Group I.	69.00	69.00	69.00	25.00	25.00					30.00	90.00
Adams Express Company	44.00	44.00	44.00								
American Express Company	25.00	25.00	25.00	25.00	25.00					30.00	90.00

D.—MILEAGE OPERATED OVER ALL LINES.

Total express mileage in Group I	10,440.97	10,605.40	11,441.78	12,396.37	11,148.50	11,154.90	11,090.94	11,019.41	11,244.37	12,080.74	13,931.23
Adams Express Company	1,531.42	1,621.86	1,625.46	1,554.91	1,574.33	1,599.45	1,602.15	1,722.67	1,899.33	1,897.89	1,756.00
American Express Company	3,243.88	3,317.87	3,975.38	4,955.47	5,297.50	5,255.79	5,189.13	4,997.08	4,766.38	5,160.19	7,362.00
Canadian Express Company	178.44	178.44	178.44	178.44	178.44	178.44	178.44	178.44	178.44	178.44	(a)
Dominion Express Company					20.00	20.00	20.00	20.00	20.00	252.00	252.00
Earle & Prew's Express	419.00	419.00	419.00	463.00	463.00	463.00	463.00	463.00	463.00	463.00	364.00
National Express Company	266.51	266.51	314.23	314.23	457.23	457.22	457.22	457.22	457.22	457.22	430.00
New England Despatch Express Company	2,574.00	2,574.00	2,574.00	2,574.00	2,574.00	2,574.00	2,574.00	2,574.00	2,574.00	2,574.00	294.00
New York and Boston Despatch Express Company.	484.00	484.00	612.00	612.00	584.00	607.00	607.00	607.00	607.00	607.00	632.23
United States Express Company									279.00	491.00	841.00
United States and Canada Express Company.	1,743.72	1,743.72	1,743.27	1,744.32	(b)						

a No information furnished for 1890.

b Business divided between the Adams and American Express Companies in 1884.

GROUP II.

A.—MILEAGE OPERATED OVER RAILWAYS.

Total mileage operated over railways in Group II.	13,491.23	14,053.77	15,373.55	17,494.37	16,398.09	16,904.34	19,286.20	19,653.59	17,957.48	18,686.96	18,068.78
Adams Express Company	4,119.80	4,234.79	4,520.87	4,981.35	5,273.33	5,604.21	5,751.77	6,947.47	7,214.17	7,073.29	6,082.00
American Express Company	2,708.19	2,866.88	3,087.59	4,208.44	3,548.72	3,564.62	3,235.36	3,860.20	3,927.72	3,933.86	4,568.00
Baltimore and Ohio Express Company	859.67	897.15	939.25	956.25	973.75	984.15	1,101.75	1,129.35	(a)		
Camden and Atlantic Express Company	67.79	73.50	73.50	66.76	66.76	79.27	79.27	79.27	79.93	81.17	78.93
Delaware, Lackawanna and Western Express Company.	818.42	925.52	1,065.92	1,021.87	1,021.87	1,021.50	1,057.75	(b)			
Erie Express Company							1,385.29	1,399.33	(c)		
Erie and New England Express Company			206.27	206.27	(d)						
Long Island Express Company				354.12	354.12	355.81	356.59	360.38	356.81	360.94	352.79
National Express Company	884.18	884.18	903.56	1,689.66	1,631.83	1,659.28	1,690.72	1,410.80	1,469.62	1,556.61	955.00
Philadelphia and Reading Express Company.	1,094.00	1,118.00	1,118.00	1,167.00	1,263.00	1,383.00	1,383.00	1,383.00	(e)		
Union Express Company	536.50	629.50	684.55	697.12	(f)						
United States Express Company	1,781.76	1,786.62	2,093.72	1,933.53	2,041.35	2,028.65	3,022.39	2,850.77	3,368.35	4,141.38	4,239.00
United States and Canada Express Company.	118.00	118.00	118.00	(g)							
Wells, Fargo & Co.'s Express									1,297.90	1,294.15	1,548.00
Westcott's Express Company	320.01	333.72	352.67	(h)							
West Jersey Express Company	182.91	185.91	209.65	212.00	223.36	223.85	222.31	233.02	242.98	245.56	245.06

a Sold to United States Express Company in 1887.
b Sold to United States Express Company in 1886.
c Business transferred to Wells, Fargo & Co.'s Express in 1887.
d Business transferred to Wells, Fargo & Co.'s Express in 1883.
e Service turned over to United States Express Company in 1887.
f Good will transferred to Adams Express Company in 1883.
g No operations in this group after 1883.
h Known as the Long Island Express Company after 1882.

TABLE 1.—MILEAGE OPERATED BY EXPRESS COMPANIES OVER RAILWAYS, WATER LINES, AND STAGE LINES DURING THE YEARS 1880-1890, INCLUSIVE—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP II—Continued.

B.—MILEAGE OPERATED OVER WATER LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over water lines in Group II.	668.00	668.00	668.00	673.00	696.00	717.00	793.00	958.00	983.00	958.00	1,208.00
Adams Express Company	193.00	193.00	193.00	193.00	193.00	193.00	269.00	369.00	394.00	394.00	399.00
American Express Company	244.00	244.00	244.00	249.00	272.00	293.00	293.00	293.00	293.00	268.00	288.00
National Express Company	231.00	231.00	231.00	231.00	231.00	231.00	231.00	231.00	231.00	231.00	231.00
United States Express Company								65.00	65.00	65.00	290.00

C.—MILEAGE OPERATED OVER STAGE LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over stage lines in Group II.					3.00	3.00	26.00	41.00	29.00	17.00	3.00
American Express Company					3.00	3.00	3.00	17.00	20.00	17.00	3.00
National Express Company							23.00	24.00	9.00		

D.—MILEAGE OPERATED OVER ALL LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total express mileage in Group II.	14,159.23	14.721.77	16,041.55	18,167.37	17,097.09	17,624.34	20,105.20	20,652.59	18,969.48	19,661.96	19,279.78
Adams Express Company	4,312.80	4,427.79	4,713.87	5,174.35	5,466.33	5,797.21	6,020.77	7,316.47	7,608.17	7,467.29	6,481.00
American Express Company	2,952.19	3,110.88	3,331.59	4,457.44	3,823.72	3,860.62	3,531.36	4,170.20	4,240.72	4,218.86	4,859.00
Baltimore and Ohio Express Company	859.67	897.15	939.25	956.25	973.75	984.15	1,101.75	1,129.35	(*a*)		
Camden and Atlantic Express Company	67.79	73.50	73.50	66.76	66.76	79.27	79.27	79.27	79.93	81.17	78.93
Delaware, Lackawanna and Western Express Company.	818.42	925.52	1,065.92	1,021.87	1,021.87	1,021.50	1,057.75	(*b*)			
Erie Express Company							1,385.29	1,399.33	(*c*)		
Erie and New England Express Company			206.27	206.27	(*d*)						
Long Island Express Company				354.12	354.12	355.81	356.59	360.38	356.81	360.94	352.79
National Express Company	1,115.18	1,115.18	1,134.56	1,920.66	1,862.83	1,890.28	1,944.72	1,665.80	1,709.62	1,787.61	1,186.00
Philadelphia and Reading Express Company.	1,094.00	1,118.00	1,118 00	1,167.00	1,263.00	1,383.00	1,383.00	1,383.00	(*e*)		
Union Express Company	536.50	629.50	684.55	697.12	(*f*)						
United States Express Company	1,781.76	1,786.62	2,093.72	1,933.53	2,041.35	2,028.65	3,022.39	2,915.77	3,433.35	4,206.38	4,529.00
United States and Canada Express Company.	118.00	118.00	118.00	(*g*)							
Wells, Fargo & Co.'s Express									1,297.90	1,294.15	1,548.00
Westcott's Express Company	320.01	333.72	352.67	(*h*)							
West Jersey Express Company	182.91	185.91	209.65	212.00	223.36	223.85	222.31	233.02	242.98	245.56	245.06

a Sold to United States Express Company in 1887.
b Sold to United States Express Company in 1886.
c Business transferred to Wells, Fargo & Co.'s Express in 1887.
d Business transferred to Wells, Fargo & Co.'s Express in 1883.
e Service turned over to United States Express Company in 1887.
f Good will transferred to Adams Express Company in 1883.
g Nc operations in this group after 1883.
h Known as the Long Island Express Company after 1882.

GROUP III.

A.—MILEAGE OPERATED OVER RAILWAYS.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over railways in Group III.	15,133.20	17,107.30	18,533.56	23,982.35	21,158.21	20,619.10	22,274.15	23,718.20	21,378.13	21,811.17	21,762.50
Adams Express Company	2,509.44	3,271.76	3,569.65	5,052.05	4,531.40	4,576.16	5,319.27	5,526.56	5,429.74	5,631.53	5,389.00
American Express Company	5,772.77	5,871.42	5,981.38	8,743.19	8,602.17	8,623.56	8,771.46	8,645.96	8,859.99	9,065.60	9,272.75
Baltimore and Ohio Express Company	568.54	568.54	568.54	568.54	1,538.44	1,167.68	1,167.68	1,613.63	(*a*)		
Canadian Express Company	59.37	59.37	59.37	59.37	59.37	59.37	59.37	59.37	59.37	59.37	(*b*)
Cincinnati, Georgetown and Portsmouth Express Company.	20.40	34.80	34.80	34.80	34.80	42.00	42.00	42.00	42.00	42.00	42.00
Erie Express Company							1,240.46	1,242.05	(*c*)		
Louisville, New Albany and Chicago Express Company.	289.40	289.40	377.39	(*d*)							
Ohio and Mississippi Express Company	245.44	245.44	245.44	245.44	245.49	(*e*)					
Pacific Express Company	353.60	746.90	692.30	685.60	763.37	518.47	569.70	599.50	599.50	599.50	479.00
Pittsburg and Western Express Company				208.87	288.17	288.17	340.37	340.37	371.47	(*f*)	
Union Express Company	1,417.27	1,540.67	2,085.60	2,468.81	(*g*)						
United States Express Company	3,896.97	4,479.00	4,919.09	5,915.68	5,095.00	5,343.69	4,763.84	5,648.76	4,904.01	4,917.04	5,129.75
Wells, Fargo & Co.'s Express									1,112.05	1,496.13	1,450.00

B.—MILEAGE OPERATED OVER WATER LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over water lines in Group III	843.00	843.00	823.00	823.00	823.00	823.00	823.00	801.00	801.00	884.00	1,046.00
Adams Express Company	608.00	608.00	608.00	608.00	608.00	608.00	608.00	586.00	586.00	669.00	746.00
American Express Company	235.00	235.00	215.00	215.00	215.00	215.00	215.00	215.00	215.00	215.00	300.00

a Sold to United States Express Company in 1887.
b No information furnished for 1890.
c Business transferred to Wells, Fargo & Co.'s Express in 1887.
d Express turned over to American Express Company in 1882.
e Operated by Adams Express Company since 1884.
f Operated by Wells, Fargo & Co.'s Express since 1888.
g Good will transferred to Adams Express Company in 1883.

TABLE 1.—MILEAGE OPERATED BY EXPRESS COMPANIES OVER RAILWAYS, WATER LINES, AND STAGE LINES DURING THE YEARS 1880-1890, INCLUSIVE—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP III—Continued.

C.—MILEAGE OPERATED OVER STAGE LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over stage lines in Group III.	33.00	58.00	60.00	70.00	55.00	55.00	27.00	30.00	30.00	99.00	61.00
Adams Express Company	29.00	29.00	29.00	34.00	44.00	44.00	16.00	19.00	19.00	78.00	55.00
American Express Company	4.00	29.00	31.00	36.00	11.00	11.00	11.00	11.00	11.00	21.00	6.00

D.—MILEAGE OPERATED OVER ALL LINES.

Total express mileage in Group III.	16,009.20	18,008.30	19,416.56	24,875.35	22,036.21	21,497.10	23,124.15	24,549.20	22,209.13	22,794.17	22,869.50
Adams Express Company	3,146.44	3,908.76	4,206.65	5,694.05	5,183.40	5,228.16	5,943.27	6,131.56	6,034.74	6,378.53	6,190.00
American Express Company	6,011.77	6,135.42	6,227.38	8,994.19	8,828.17	8,849.56	8,997.46	8,871.96	9,085.99	9,301.60	9,578.75
Baltimore and Ohio Express Company	568.54	568.54	568.54	568.54	1,538.44	1,167.68	1,167.68	1,613.63	(a)	....	....
Canadian Express Company	59.37	59.37	59.37	59.37	59.37	59.37	59.37	59.37	59.37	59.37	(b)
Cincinnati, Georgetown and Portsmouth Express Company.	20.40	34.80	34.80	34.80	34.80	42.00	42.00	42.00	42.00	42.00	42.00
Erie Express Company	....	....	....	....	....	....	1,240.46	1,242.05	(c)	....	....
Louisville, New Albany and Chicago Express Company.	289.40	289.40	377.39	(d)	....	....	....	....	....	....	....
Ohio and Mississippi Express Company	245.44	245.44	245.44	245.44	245.49	(e)	....	....	....	....	....
Pacific Express Company	353.60	746.90	692.30	685.60	763.37	518.47	569.70	599.50	599.50	599.50	479.00
Pittsburg and Western Express Company	....	....	....	208.87	288.17	288.17	340.37	340.37	371.47	(f)	....
Union Express Company	1,417.27	1,540.67	2,085.60	2,468.81	(g)	....	....	....	....	....	....
United States Express Company	3,896.97	4,479.00	4,919.09	5,915.68	5,095.00	5,343.69	4,763.84	5,648.76	4,904.01	4,917.04	5,129.75
Wells, Fargo & Co.'s Express	....	....	....	....	....	....	....	....	1,112.05	1,496.13	1,450.00

a Sold to United States Express Company in 1887.
b No information furnished for 1890.
c Business transferred to Wells, Fargo & Co.'s Express in 1887.
d Express turned over to American Express Company in 1882.
e Operated by Adams Express Company since 1884.
f Operated by Wells, Fargo & Co.'s Express since 1888.
g Good will transferred to Adams Express Company in 1883.

GROUP IV.

A.—MILEAGE OPERATED OVER RAILWAYS.

Total mileage operated over railways in Group IV.	4,607.55	4,790.75	5,112.45	5,449.27	5,723.24	5,821.32	6,273.47	7,428.25	7,579.84	7,998.13	8,525.50
Adams Express Company	950.23	990.93	1,190.93	1,190.93	1,291.70	1,291.70	1,291.70	1,459.70	1,506.90	1,541.20	1,550.50
Baltimore and Ohio Express Company	127.28	127.28	127.28	163.50	163.50	163.50	163.50	420.38	(a)	....	....
Southern Express Company	3,530.04	3,672.54	3,794.24	4,094.84	4,268.04	4,366.12	4,818.27	4,982.79	5,519.56	5,903.80	6,435.00
United States Express Company	....	....	....	....	....	....	....	565.38	553.38	553.13	540.00

D.—MILEAGE OPERATED OVER ALL LINES. (*b*)

Total express mileage in Group IV.	4,607.55	4,790.75	5,112.45	5,449.27	5,723.24	5,821.32	6,273.47	7,428.25	7,579.84	7,998.13	8,525.50
Adams Express Company	950.23	990.93	1,190.93	1,190.93	1,291.70	1,291.70	1,291.70	1,459.70	1,506.90	1,541.20	1,550.50
Baltimore and Ohio Express Company	127.28	127.28	127.28	163.50	163.50	163.50	163.50	420.38	(a)	....	....
Southern Express Company	3,530.04	3,672.54	3,794.24	4,094.84	4,268.04	4,366.12	4,818.27	4,982.79	5,519.56	5,903.80	6,435.00
United States Express Company	....	....	....	....	....	....	....	565.38	553.38	553.13	540.00

a Sold to United States Express Company in 1887.
b No mileage over water and stage lines in this group.

GROUP V.

A.—MILEAGE OPERATED OVER RAILWAYS.

Total mileage operated over railways in Group V.	7,652.73	8,682.49	9,444.83	10,593.16	11,581.77	12,464.12	12,764.16	14,298.58	15,171.21	16,150.36	16,524.48
Adams Express Company	767.46	1,370.00	1,332.01	1,479.34	1,482.68	1,482.68	1,482.68	1,160.62	1,247.52	1,465.52	1,507.00
Baltimore and Ohio Express Company	....	....	....	....	....	....	....	1,053.14	(a)	....	....
Pacific Express Company	....	....	....	....	....	....	....	513.45	513.45	640.58	687.98
Southern Express Company	6,885.27	7,312.49	8,112.82	9,113.82	10,099.09	10,981.44	11,281.48	11,571.37	11,798.11	12,614.67	12,898.00
United States Express Company	....	....	....	....	....	....	....	....	1,612.13	1,429.59	1,431.50

B.—MILEAGE OPERATED OVER WATER LINES.

Total mileage operated over water lines in Group V.	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	....
Adams Express Company	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	....

a Sold to United States Express Company in 1887.

TABLE 1.—MILEAGE OPERATED BY EXPRESS COMPANIES OVER RAILWAYS, WATER LINES, AND STAGE LINES DURING THE YEARS 1880-1890, INCLUSIVE—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP V—Continued.

C.—MILEAGE OPERATED OVER STAGE LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over stage lines in Group V.	110.00	88.00	101.00	101.00	84.00	74.00	74.00	105.00	105.00	115.00	122.00
Adams Express Company	110.00	88.00	101.00	101.00	84.00	74.00	74.00	105.00	105.00	115.00	122.00

D.—MILEAGE OPERATED OVER ALL LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total express mileage in Group V	7,912.73	8,920.49	9,695.83	10,844.16	11,815.77	12,688.12	12,988.16	14,553.58	15,426.21	16,415.36	16,646.48
Adams Express Company	1,027.46	1,608.00	1,583.01	1,730.34	1,716.68	1,706.68	1,706.68	1,415.62	1,502.52	1,730.52	1,629.00
Baltimore and Ohio Express Company	....	....	....	....	....	....	....	1,053.14	(a)	....	....
Pacific Express Company	....	....	....	....	....	....	....	513.45	513.45	640.58	687.98
Southern Express Company	6,885.27	7,312.49	8,112.82	9,113.82	10,099.09	10,981.44	11,281.48	11,571.37	11,798.11	12,614.67	12,898.00
United States Express Company	....	....	....	....	....	....	....	....	1,612.13	1,429.59	1,431.50

a Sold to United States Express Company in 1887.

GROUP VI.

A.—MILEAGE OPERATED OVER RAILWAYS.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over railways in Group VI.	23,920.62	25,902.99	28,326.34	29,736.29	31,429.61	30,732.45	32,769.53	34,135.77	39,610.65	37,726.56	37,848.42
Adams Express Company	926.90	1,011.06	1,081.56	1,194.06	1,194.06	1,197.76	1,192.69	1,494.26	5,174.21	5,201.25	5,103.00
American Express Company	13,713.24	14,729.41	16,128.80	17,208.51	18,601.12	17,828.81	18,587.69	19,266.96	19,898.36	21,113.15	20,540.03
Baltimore and Ohio Express Company	....	....	....	....	....	370.76	370.76	446.52	(a)	....	....
Northern Pacific Express Company	586.00	618.00	618.00	783.60	1,044.54	1,095.17	1,174.91	1,314.75	1,441.41	1,435.67	2,388.14
Ohio and Mississippi Express Company	370.76	370.76	370.76	370.76	370.76	(b)	....	....	....	....	....
Pacific Express Company	2,131.30	2,686.10	2,906.00	3,269.80	3,307.20	2,444.45	3,226.01	2,354.94	1,996.33	1,951.43	1,951.00
Southern Express Company	....	....	....	....	....	....	152.00	152.00	152.00	152.00	152.00
United States Express Company	6,192.42	6,487.66	7,221.22	6,878.14	6,880.51	7,764.08	8,034.05	9,074.92	10,303.02	7,227.74	6,986.25
Wells, Fargo & Co.'s Express	....	....	....	31.42	31.42	31.42	31.42	31.42	645.32	645.32	728.00

B.—MILEAGE OPERATED OVER WATER LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over water lines in Group VI.	....	....	....	....	....	....	20.00	20.00	....	....	....
American Express Company	....	....	....	....	....	....	20.00	20.00	....	....	....

C.—MILEAGE OPERATED OVER STAGE LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over stage lines in Group VI.	....	....	5.00	5.00	11.00	11.00	36.00	26.00	47.00	32.00	35.00
Adams Express Company	....	....	....	....	....	....	....	....	....	....	4.00
American Express Company	....	....	5.00	5.00	11.00	11.00	36.00	26.00	47.00	32.00	31.00

D.—MILEAGE OPERATED OVER ALL LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total express mileage in Group VI.	23,920.62	25,902.99	28,331.34	29,741.29	31,440.61	30,743.45	32,825.53	34,181.77	39,657.65	37,758.56	37,883.42
Adams Express Company	926.90	1,011.06	1,081.56	1,194.06	1,194.06	1,197.76	1,192.69	1,494.26	5,174.21	5,201.25	5,107.00
American Express Company	13,713.24	14,729.41	16,133.80	17,213.51	18,612.12	17,839.81	18,643.69	19,312.96	19,945.36	21,145.15	20,571.03
Baltimore and Ohio Express Company	....	....	....	....	....	370.76	370.76	446.52	(a)	....	....
Northern Pacific Express Company	586.00	618.00	618.00	783.60	1,044.54	1,095.17	1,174.91	1,314.75	1,441.41	1,435.67	2,388.14
Ohio and Mississippi Express Company	370.76	370 76	370.76	370.76	370.76	(b)	....	....	....	....	....
Pacific Express Company	2,131.30	2,686.10	2,906.00	3,269.80	3,307.20	2,444.45	3,226.01	2,354.94	1,996.33	1,951.43	1,951.00
Southern Express Company	....	....	....	....	....	....	152.00	152.00	152.00	152.00	152.00
United States Express Company	6,192.42	6,487.66	7,221.22	6,878.14	6,880.51	7,764.08	8,034.05	9,074.92	10,303.02	7.227.74	6,986.25
Wells, Fargo & Co.'s Express	....	....	....	31.42	31.42	31.42	31.42	31.42	645.32	645.32	728.00

a Sold to United States Express Company in 1887.

b Operated by Adams Express Company since 1884.

GROUP VII.

A.—MILEAGE OPERATED OVER RAILWAYS.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over railways in Group VII.	2,265.70	2,449.42	4,035.32	3,559.17	4,467.67	4,806.06	5,550.80	6,985.86	7,346.34	7.878.95	8,785.28
American Express Company (a)	606.01	770.50	959.02	....	....	....	....	549.25	549.25	742.95	755.22
Northern Pacific Express Company	....	....	221.00	564.60	752.30	752.30	752.30	752.30	785.90	785.90	1,228.86
Pacific Express Company	1,316.00	1,323.70	1,351.40	1.350.60	1,666.40	1,701.84	1,758.80	1,572.83	1,592.07	1,680.51	2,305.49
United States Express Company	343.69	355.22	355.22	(b)	....	....	....	....	....	....	....
Wells, Fargo & Co.'s Express	....	....	1,148.68	1,643.97	2,048.97	2,351.92	3,039.70	4,111.48	4,419.12	4,669.59	4,495.71

a Operations for 1880-1882 over the Chicago, Burlington and Quincy and Fremont, Elkhorn and Missouri Valley railroads; operations for 1887-1890 over the Great Northern and Montana Central railroads.

b No operations in this group after 1882.

TABLE 1.—MILEAGE OPERATED BY EXPRESS COMPANIES OVER RAILWAYS, WATER LINES, AND STAGE LINES DURING THE YEARS 1880-1890, INCLUSIVE—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP VII—Continued.

B.—MILEAGE OPERATED OVER WATER LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over water lines in Group VII.	....	....	....	1.00	1.00	1.00	1.00	1.00	1.00	1.00	....
American Express Company	....	....	....	1.00	1.00	1 00	1.00	1.00	1.00	1.00	....

C.—MILEAGE OPERATED OVER STAGE LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over stage lines in Group VII.	....	....	....	....	....	294.00	200.00	....	....	....	....
Wells, Fargo & Co.'s Express	....	....	....	....	....	294.00	200.00	....	....	....	....

D.—MILEAGE OPERATED OVER ALL LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total express mileage in Group VII.	2,265.70	2,449.42	4,035.32	3,560.17	4,468.67	5,101.06	5,751.80	6,986.86	7,347.34	7,879.95	8,785.28
American Express Company (*a*)	606.01	770.50	959.02	1.00	1.00	1.00	1.00	550.25	550.25	743.95	755.22
Northern Pacific Express Company	....	....	221.00	564.60	752.30	752.30	752.30	752.30	785.90	785.90	1,228.86
Pacific Express Company	1,316.00	1,323.70	1,351.40	1,350.60	1,666.40	1,701.84	1,758.80	1,572.83	1,592.07	1,680.51	2,305.49
United States Express Company	343.69	355.22	355.22	(*b*)	....	....	....	....	....	....	....
Wells, Fargo & Co.'s Express	....	....	1,148.68	1,643.97	2,048.97	2,645.92	3,239.70	4,111.48	4,419.12	4,669.59	4,495.71

a Operations for 1880-1882 over the Chicago, Burlington and Quincy and Fremont, Elkhorn and Missouri Valley railroads; operations for 1887-1890 over the Great Northern and Montana Central railroads.
b No operations in this group after 1882.

GROUP VIII.

A.—MILEAGE OPERATED OVER RAILWAYS.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over railways in Group VIII.	8,784.70	12,514.73	13,288.29	13,319.19	13,802.29	14,247.66	14,073.06	17,617.21	18,344.94	19,342.33	20,154.54
Adams Express Company	3,743.32	4,213.67	4,576.43	2,791.84	2,982.97	2,978.27	3,229.42	2,753.47	2,209.86	2,287.22	2,205.00
American Express Company	68.00	68.00	(*a*)	....	....	....	....	61.42	(*a*)	....	....
Denver and Rio Grande Express	474.00	786.00	1,165.00	1,559.00	1,500.00	1,317.00	1,317.00	1,347.00	1,463.00	1,493.90	1,687.00
Pacific Express Company	2,972.09	4,019.10	4,687.10	4,975.03	5,081.05	5,243.07	5,771.83	7,102.49	7,661.51	8,301.00	9,101.23
St. Louis, Iron Mountain and Southern Express Company.	685.00	719.00	(*b*)	....	....	....	....	....	....	....	....
Southern Express Company	842.29	919.29	1,039.29	1,344.23	1,362.23	1,735.23	682.94	522.94	321.95	321.95	1,201.00
Texas Express Company	....	....	....	430.04	430.04	430.04	430.04	430.04	530.36	581.76	(*c*)
United States Express Company	....	....	....	....	....	....	....	1,196.60	1,575.20	1,765.00	1,765.00
Wells, Fargo & Co.'s Express	....	1 789.67	1,820.47	2,219.05	2,446.00	2,544.05	2,641.83	4,203.25	4,583.06	4,592.40	4,195.31

B.—MILEAGE OPERATED OVER WATER LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over water lines in Group VIII.	....	....	....	0.50	0.50	0.50	0.50	0.50	0.50	0.50	....
American Express Company	....	....	....	0.50	0.50	0.50	0.50	0.50	0.50	0.50	....

C.—MILEAGE OPERATED OVER STAGE LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over stage lines in Group VIII.	....	44.00	40.00	....	....	....	....	....	....	....	....
Adams Express Company	....	44.00	40.00	....	....	....	....	....	....	....	....

D.—MILEAGE OPERATED OVER ALL LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total express mileage in Group VIII.	8,784.70	12,558.73	13,328.29	13,319.69	13,802.79	14,248.16	14,073.56	17,617.71	18,345.44	19,342.83	20,154.54
Adams Express Company	3,743.32	4,257.67	4,616.43	2,791.84	2,982.97	2,978.27	3,229.42	2,753.47	2,209.86	2,287.22	2,205.00
American Express Company	68.00	68.00	....	0.50	0.50	0.50	0.50	61.92	0.50	0.50	....
Denver and Rio Grande Express	474.00	786.00	1,165.00	1,559.00	1,500.00	1,317.00	1,317.00	1,347.00	1,463.00	1,493.00	1,687.00
Pacific Express Company	2,972.09	4,019.10	4,687.10	4,975.03	5,081.05	5,243.07	5,771.83	7,102.49	7,661.51	8,301.00	9,101.23
St. Louis, Iron Mountain and Southern Express Company.	685.00	719.00	(*b*)	....	....	....	....	....	....	....	....
Southern Express Company	842.29	919.29	1,039.29	1,344.23	1,362.23	1,735.23	682.94	522.94	321.95	321.95	1,201.00
Texas Express Company	....	....	....	430.04	430.04	430.04	430.04	430.04	530.36	581.76	(*c*)
United States Express Company	....	....	....	....	....	....	....	1,196.60	1,575.20	1,765.00	1,765.00
Wells, Fargo & Co.'s Express	....	1,789.67	1,820.47	2,219.05	2,446.00	2,544.05	2,641.83	4,203.25	4,583.06	4,592.40	4,195.31

a Operations over the Atchison, Topeka and Santa Fe railroad suspended in 1882; over St. Louis, Kansas City and Colorado railroad in 1887 only.
b Consolidated with PacificExpress Company in 1882.
c Business transferred to Southern Express Company in 1890.

TABLE 1.—MILEAGE OPERATED BY EXPRESS COMPANIES OVER RAILWAYS, WATER LINES, AND STAGE LINES DURING THE YEARS 1880-1890, INCLUSIVE—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP IX.

A.—MILEAGE OPERATED OVER RAILWAYS.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over railways in Group IX.	2,707.24	4,002.93	5,657.29	6,660.05	6,651.54	7,729.58	7,887.69	8,828.15	8,759.51	8,945.71	9,088.96
Baltimore and Ohio Express Company								189.00	(a)		
Pacific Express Company	93.00	271.00	722.50	875.50	902.50	1,749.00	3,917.50	4,473.50	4,176.50	4,283.50	4,562.96
Southern Express Company	72.70	72.70	142.00	170.40	170.40	170.40	189.00	(b)			1,028.00
Texas Express Company	2,541.54	3,659.23	4,792.79	4,040.38	4,040.38	3,605.81	1,423.64	1,818.49	933.60	933.60	(c)
United States Express Company									194.25	218.25	256.00
Wells, Fargo & Co.'s Express				1,573.77	1,538.26	2,204.37	2,357.55	2,347.16	3,455.16	3,510.36	3,242.00

D.—MILEAGE OPERATED OVER ALL LINES. (d)

Total express mileage in Group IX.	2,707.24	4,002.93	5,657.29	6,660.05	6,651.54	7,729.58	7,887.69	8,828.15	8,759.51	8,945.71	9,088.96
Baltimore and Ohio Express Company								189.00	(e)		
Pacific Express Company	93.00	271.00	722.50	875.50	902.50	1,749.00	3,917.50	4,473.50	4,176.50	4,283.50	4,562.96
Southern Express Company	72.70	72.70	142.00	170.40	170.40	170.40	189.00	(b)			1,028.00
Texas Express Company	2,541.54	3,659.23	4,792.79	4,040.38	4,040.38	3,605.81	1,423.64	1,818.49	933.60	933.60	(c)
United States Express Company									194.25	218.25	256.00
Wells, Fargo & Co.'s Express				1,573.77	1,538.26	2,204.37	2,357.55	2,347.16	3,455.16	3,510.36	3,242.00

a Operations over Vicksburg, Shreveport and Pacific railroad in 1887 only; sold to United States Express Company in 1887.
b Operations over Vicksburg, Shreveport and Pacific railroad suspended after 1886.
c Business transferred to Southern Express Company in 1890.
d No mileage over water and stage lines in this group.
e Sold to United States Express Company in 1887.

GROUP X.

A.—MILEAGE OPERATED OVER RAILWAYS.

Total mileage operated over railways in Group X.	4,909.81	5,828.50	6,529.60	8,915.16	9,817.77	10,494.61	10,649.83	10,929.14	10,608.03	11,170.75	11,023.82
Adams Express Company		286.00	286.00	(a)							
Denver and Rio Grande Express				369.00	369.00	369.00	369.00	409.00	409.00	409.00	413.50
Northern Pacific Express Company				534.00	643.00	802.00	716.00	1,786.40	1,109.30	1,247.04	1,102.00
Pacific Express Company	306.10	687.90	865.70	1,218.52	1,432.34	1,831.35	1,797.67	2,146.59	2,158.30	2,392.96	2,039.34
Wells, Fargo & Co.'s Express	4,603.71	4,854.60	5,377.90	6,793.64	7,373.43	7,492.26	7,767.16	6,587.15	6,931.43	7,121.75	7,468.98

B.—MILEAGE OPERATED OVER WATER LINES.

Total mileage operated over water lines in Group X.	2,180.00	2,180.00	2,180.00	3,354.00	3,354.00	3,430.00	3,485.00	3,451.00	3,485.00	2,350.00	3,602.00
Northern Pacific Express Company				1,174.00	1,174.00	1,250.00	1,305.00	100.00	100.00	100.00	161.00
Pacific Express Company								1,296.00	1,330.00	195.00	195.00
Wells, Fargo & Co.'s Express	2,180.00	2,180.00	2,180.00	2,180.00	2,180.00	2,180.00	2,180.00	2,055.00	2,055.00	2,055.00	3,246.00

C.—MILEAGE OPERATED OVER STAGE LINES.

Total mileage operated over stage lines in Group X.	4,919.00	5,267.00	4,623.00	3,864.00	4,117.00	4,647.00	4,004.00	3,563.00	3,996.00	3,459.00	2,744.00
Adams Express Company	6.00	56.00	56.00	(a)							
Northern Pacific Express Company											20.00
Wells, Fargo & Co.'s Express	4,913.00	5,211.00	4,567.00	3,864.00	4,117.00	4,647.00	4,004.00	3,563.00	3,996.00	3,459.00	2,724.00

D.—MILEAGE OPERATED OVER ALL LINES.

Total express mileage in Group X.	12,008.81	13,275.50	13,332.60	16,133.16	17,288.77	18,571.61	18,138.83	17,943.14	18,089.03	16,979.75	17,369.82
Adams Express Company	6.00	342.00	342.00	(a)							
Denver and Rio Grande Express				369.00	369.00	369.00	369.00	409.00	409.00	409.00	413.50
Northern Pacific Express Company				1,708.00	1,817.00	2,052.00	2,021.00	1,886.40	1,209.30	1,347.04	1,283.00
Pacific Express Company	306.10	687.90	865.70	1,218.52	1,432.34	1,831.35	1,797.67	3,442.59	3,488.30	2,587.96	2,234.34
Wells, Fargo & Co.'s Express	11,696.71	12,245.60	12,124.90	12,837.64	13,670.43	14,319.26	13,951.16	12,205.15	12,982.43	12,635.75	13,438.98

a No operations in this group after 1882.

TABLE 1.—MILEAGE OPERATED BY EXPRESS COMPANIES OVER RAILWAYS, WATER LINES, AND STAGE LINES DURING THE YEARS 1880-1890, INCLUSIVE—Continued.

Part 2.—BY COMPANY TOTALS.

A.—MILEAGE OPERATED OVER RAILWAYS.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over railways.	90,649.75	102,614.28	114,129.01	128,688.38	128,801.69	131,557.14	139,202.83	151,271.16	154,406.50	157,897.66	160,597.51
Adams Express Company	14,351.57	16,803.07	17,985.91	18,119.48	18,205.47	18,570.23	19,709.68	20,784.75	24,401.73	24,817.90	23,300.50
American Express Company	24,903.09	26,355.08	28,573.17	33,681.61	34,655.51	33,873.78	34,384.64	36,175.87	36,796.70	38,510.75	40,133.00
Baltimore and Ohio Express Company	1,555.49	1,592.97	1,635.07	1,688.29	2,675.69	2,686.09	2,803.69	4,852.02	(a)	...	...
Camden and Atlantic Express Company	67.79	73.50	73.50	66.76	66.76	79.27	79.27	79.27	79.93	81.17	78.93
Canadian Express Company	237.81	237.81	237.81	237.81	237.81	237.81	237.81	237.81	237.81	237.81	(b)
Cincinnati, Georgetown and Portsmouth Express Company.	20.40	34.80	34.80	34.80	34.80	42.00	42.00	42.00	42.00	42.00	42.00
Delaware, Lackawanna and Western Express Company.	818.42	925.52	1,065.92	1,021.87	1,021.87	1,021.50	1,057.75	(c)	...	...	...
Denver and Rio Grande Express	474.00	786.00	1,165.00	1,928.00	1,869.00	1,686.00	1,686.00	1,756.00	1,872.00	1,902.00	2,100.50
Dominion Express Company	...	...	...	...	20.00	20.00	20.00	20.00	20.00	252.00	252.00
Earle & Prew's Express	201.00	201.00	201.00	245.00	245.00	245.00	245.00	245.00	245.00	245.00	146.00
Erie Express Company	...	...	...	...	...	...	2,625.75	2,641.38	(d)	...	...
Erie and New England Express Company	...	...	206.27	206.27	(e)	...	...	...	...	...	...
Long Island Express Company	...	...	...	354.12	354.12	355.81	356.59	360.38	356.81	360.94	352.79
Louisville, New Albany and Chicago Express Company.	289.40	289.40	377.39	(f)	...	...	...	...	...	...	...
National Express Company	1,150.69	1,150.69	1,217.79	2,003.89	2,089.06	2,116.50	2,147.94	1,868.02	1,926.84	2,013.83	1,385.00
New England Despatch Express Company.	1,167.00	1,167.00	1,167.00	1,167.00	1,167.00	1,167.00	1,167.00	1,167.00	1,167.00	1,167.00	887.00
New York and Boston Despatch Express Company.	251.00	251.00	379.00	379.00	351.00	374.00	374.00	374.00	374.00	374.00	399.23
Northern Pacific Express Company	586.00	618.00	839.00	1,882.20	2,439.84	2,649.47	2,643.21	3,853.45	3,336.61	3,468.61	4,719.00
Ohio and Mississippi Express Company	616.20	616.20	616.20	616.20	616.25	(g)	...	...	...	...	...
Pacific Express Company	7,172.09	9,734.70	11,225.00	12,375.05	13,152.86	13,488.18	17,041.51	18,763.30	18,697.66	19,849.48	21,127.00
Philadelphia and Reading Express Company.	1,094.00	1,118.00	1,118.00	1,167.00	1,263.00	1,383.00	1,383.00	1,383.00	(h)	...	...
Pittsburg and Western Express Company	...	...	...	208.87	288.17	288.17	340.37	340.37	371.47	(i)	...
St. Louis, Iron Mountain and Southern Express Company.	685.00	719.00	(j)	...	...	...	...	...	...	...	...
Southern Express Company	11,330.30	11,977.02	13,088.35	14,723.29	15,899.76	17,253.19	17,123.69	17,229.10	17,791.62	18,992.42	21,714.00
Texas Express Company	2,541.54	3,659.23	4,792.79	4,470.42	4,470.42	4,035.85	1,853.68	2,248.53	1,463.96	1,515.36	(k)
Union Express Company	1,953.77	2,170.17	2,770.15	3,165.93	(l)	...	...	...	...	...	...
United States Express Company	12,214.84	13,108.50	14,589.25	14,727.35	14,016.86	15,136.42	15,820.28	19,336.43	22,538.34	20,492.13	20,587.50
United States and Canada Express Company.	1,861.72	1,861.72	1,861.27	1,744.32	(m)	...	...	...	...	...	...
Wells, Fargo & Co.'s Express	4,603.71	6,644.27	8,347.05	12,261.85	13,438.08	14,624.02	15,837.66	17,280.46	22,444.04	23,329.70	23,128.00
Westcott's Express Company	320.01	333.72	352.67	(n)	...	...	...	...	...	...	...
West Jersey Express Company	182.91	185.91	209.65	212.00	223.36	223.85	222.31	233.02	242.98	245.50	245.06

B.—MILEAGE OPERATED OVER WATER LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over water lines.	7,036.00	7,096.00	7,366.00	8,393.50	8,376.50	8,538.50	8,689.50	8,724.50	9,014.50	8,207.50	10,882.00
Adams Express Company	1,104.00	1,104.00	1,104.00	1,076.00	1,076.00	1,111.00	1,187.00	1,385.00	1,410.00	1,493.00	1,437.00
American Express Company	1,663.00	1,723.00	1,993.00	1,874.50	1,857.50	1,908.50	1,928.50	1,734.50	1,714.50	1,959.50	2,863.00
Earle & Prew's Express	218.00	218.00	218.00	218.00	218.00	218.00	218.00	218.00	218.00	218.00	218.00
National Express Company	231.00	231.00	231.00	231.00	231.00	231.00	231.00	231.00	231.00	231.00	231.00
New England Despatch Express Company.	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00	1,407.00
New York and Boston Despatch Express Company.	233.00	233.00	233.00	233.00	233.00	233.00	233.00	233.00	233.00	233.00	233.00
Northern Pacific Express Company	...	...	...	1,174.00	1,174.00	1,250.00	1,305.00	100.00	100.00	100.00	161.00
Pacific Express Company	...	...	...	...	...	...	...	1,296.00	1,330.00	195.00	195.00
United States Express Company	...	...	...	...	...	...	...	65.00	316.00	316.00	891.00
Wells, Fargo & Co.'s Express	2,180.00	2,180.00	2,180.00	2,180.00	2,180.00	2,180.00	2,180.00	2,055.00	2,055.00	2,055.00	3,246.00

C.—MILEAGE OPERATED OVER STAGE LINES.

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total mileage operated over stage lines.	5,131.00	5,526.00	4,898.00	4,065.00	4,295.00	5,084.00	4,367.00	3,765.00	4,207.00	3,752.00	3,055.00
Adams Express Company	189.00	261.00	270.00	135.00	128.00	118.00	90.00	124.00	124.00	193.00	181.00
American Express Company	29.00	54.00	61.00	66.00	50.00	25.00	50.00	54.00	78.00	100.00	130.00
National Express Company	...	...	...	...	...	...	23.00	24.00	9.00	...	...
Northern Pacific Express Company	...	...	...	...	...	...	...	...	...	...	20.00
Wells, Fargo & Co.'s Express	4,913.00	5,211.00	4,567.00	3,864.00	4,117.00	4,941.00	4,204.00	3,563.00	3,996.00	3,459.00	2,724.00

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a Sold to United States Express Company in 1887.
b No information furnished for 1890.
c Sold to United States Express Company in 1886.
d Business transferred to Wells, Fargo & Co.'s Express in 1887.
e Business transferred to Wells, Fargo & Co.'s Express in 1883.
f Express turned over to American Express Company in 1882.
g Operated by Adams Express Company since 1884.
h Service turned over to United States Express Company in 1887.
i Operated by Wells, Fargo & Co.'s Express since 1888.
j Consolidated with Pacific Express Company in 1882.
k Business transferred to Southern Express Company in 1890.
l Good-will transferred to Adams Express Company in 1883.
m Business divided between Adams and American Express Companies in 1884.
n Known as the Long Island Express Company after 1882.

TABLE 1.—MILEAGE OPERATED BY EXPRESS COMPANIES OVER RAILWAYS, WATER LINES, AND STAGE LINES DURING THE YEARS 1880-1890, INCLUSIVE—Continued.

Part 2.—BY COMPANY TOTALS—Continued.

D.—MILEAGE OPERATED OVER ALL LINES

COMPANIES.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total express mileage operated over all lines.	102,816.75	115,236.28	126,393.01	141,146.88	141,473.19	145,179.64	152,259.33	163,760.66	167,628.00	169,857.16	174,534.51
Adams Express Company	15,644.57	18,168.07	19,359.91	19,330.48	19,409.47	19,799.23	20,986.68	22,293.75	25,935.73	26,503.90	24,918 50
American Express Company	26,595.09	28,132.08	30,627.17	35,622.11	36,563.01	35,807.28	36,363.14	37,964.37	38,589.20	40,570.25	43,126.00
Baltimore and Ohio Express Company	1,555.49	1,592.97	1,635.07	1,688.29	2,675.69	2,686.09	2,803.69	4,852.02	(a)		
Camden and Atlantic Express Company	67.79	73.50	73.50	66.76	66.76	79.27	79.27	79.27	79.93	81.17	78.93
Canadian Express Company	237.81	237.81	237.81	237.81	237.81	237.81	237.81	237.81	237.81	237.81	(b)
Cincinnati, Georgetown and Portsmouth Express Company.	20.40	34.80	34.80	34.80	34.80	42.00	42.00	42.00	42.00	42.0C	42.00
Delaware, Lackawanna and Western Express Company.	818.42	925.52	1,065.92	1,021.87	1,021.87	1,021.50	1,057.75	(c)			
Denver and Rio Grande Express	474.00	786.00	1,165.00	1,928.00	1,869.00	1,686.00	1,686.00	1,756.00	1,872.00	1,902.00	2,100.50
Dominion Express Company					20.00	20.00	20.00	20.00	20.00	252.00	252.00
Earle & Prew's Express	419.00	419.00	419.00	463.00	463.00	463.00	463.00	463.00	463.00	463.00	364.00
Erie Express Company							2,625.75	2,641.38	(d)		
Erie and New England Express Company			206.27	206.27	(e)						
Long Island Express Company				354.12	354.12	355.81	356.59	360.38	356.81	360.94	352.79
Louisville, New Albany and Chicago Express Company.	289.40	289.40	377.39	(f)							
National Express Company	1,381.69	1,381.69	1,448.79	2,234.89	2,320.06	2,347.50	2,401.94	2.123.02	2,166.84	2,244.83	1,616.00
New England Despatch Express Company.	2,574.00	2,574.00	2,574.00	2,574.00	2,574.00	2,574.00	2,574.00	2,574.00	2,574.00	2.574.00	2,294.00
New York and Boston Despatch Express Company.	484.00	484.00	612.00	612.00	584.00	607.00	607.00	607.00	607.00	607.00	632.23
Northern Pacific Express Company	586.00	618.00	839.00	3,056.20	3,613.84	3,899.47	3,948.21	3,953.45	3,436.61	3,568.61	4,900.00
Ohio and Mississippi Express Company	616.20	616.20	616.20	616.20	616.25	(g)					
Pacific Express Company	7,172.09	9,734.70	11,225.00	12,375.05	13,152.86	13,488.18	17,041.51	20,059.30	20,027.66	20,044.48	21,322.00
Philadelphia and Reading Express Company.	1,094.00	1,118.00	1,118.00	1,167.00	1,263.00	1,383.00	1,383.00	1,383.00	(h)		
Pittsburg and Western Express Company				208.87	288.17	288.17	340.37	340.37	371.47	(i)	
St. Louis, Iron Mountain and Southern Express Company.	685.00	719.00	(j)								
Southern Express Company	11,330.30	11,977.02	13,088.35	14,723.29	15,899.76	17,253.19	17,123.69	17,229.10	17,791.62	18,992.42	21,714.00
Texas Express Company	2,541.54	3,659.23	4,792.79	4,470.42	4,470.42	4,035.85	1,853.68	2,248.53	1,463.96	1,515.36	(k
Union Express Company	1,953.77	2,170.17	2,770.15	3,165.93	(l)						
United States Express Company	12,214.84	13,108.50	14,589.25	14,727.35	14,016.86	15,136.42	15,820.28	19,401.43	22,854.34	20,808.13	21,478.50
United States and Canada Express Company.	1,861.72	1,861.72	1,861.27	1,744.32	(m)						
Wells, Fargo & Co.'s Express	11,696.71	14,035.27	15,094.05	18,305.85	19,735.08	21,745.02	22,221.66	22,898.46	28,495.04	28,843.70	29.098.00
Westcott's Express Company	320.01	333.72	352.67	(n)							
West Jersey Express Company	182.91	185.91	209.65	212.00	223.36	223.85	222.31	233.02	242.98	245.56	245.06

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a Sold to United States Express Company in 1887.
b No information furnished for 1890.
c Sold to United States Express Company in 1886.
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i Operated by Wells, Fargo & Co.'s Express since 1888.
j Consolidated with Pacific Express Company in 1882.
k Business transferred to Southern Express Company in 1890.
l Good will transferred to Adams Express Company in 1883.
m Business divided between Adams and American Express Companies in 1884.
n Known as the Long Island Express Company after 1882.

Part 3.—BY GROUP TOTALS.

A.—MILEAGE OPERATED OVER RAILWAYS.

GROUPS.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total express mileage operated over railways.	90,649.75	102,614.28	114.129.01	128,688.38	128,801.69	131,557.14	139,202.83	151,271.16	154,406.50	157,897.66	160,597.51
Group I	7,176.97	7,281.40	7,827.78	8,979.37	7,771.50	7,737.90	7,673.94	7,676.41	7,650.37	8,186.74	8,815.23
II	13,491.23	14,053.77	15,373.55	17,494.37	16,398.09	16,904.34	19,286.20	19,653.59	17,957.48	18,686.96	18,068.78
III	15,133.20	17,107.30	18,533.56	23,982.35	21,158.21	20,619.10	22,274.15	23,718.20	21,378.13	21.811.17	21,762.50
IV	4,607.55	4,790.75	5,112.45	5,449.27	5,723.24	5,821.32	6,273.47	7,428.25	7,579.84	7,998.13	8,525.50
V	7,652.73	8,682.49	9,444.83	10,593.16	11,581.77	12,464.12	12,764.16	14,298.58	15,171.21	16,150.36	16,524.48
VI	23,920.62	25,902.99	28,326.34	29,736.29	31,429.61	30,732.45	32,769.53	34,135.77	39,610.65	37,726.56	37,848.42
VII	2,265.70	2,449.42	4,035.32	3,559.17	4,467.67	4,806.06	5,550.80	6,985.86	7,346.34	7,878.95	8,785.28
VIII	8,784.70	12,514.73	13,288.29	13,319.19	13,802.29	14,247.66	14,073.06	17,617.21	18,344.94	19,342.33	20,154.54
IX	2,707.24	4,002.93	5,657.29	6,660.05	6,651.54	7,729.58	7,887.69	8,828.15	8,759.51	8,945.71	9,088.96
X	4,909.81	5,828.50	6,529.60	8,915.16	9,817.77	10,494.61	10,649.83	10,929.14	10,608.03	11.170.75	11,023.82

B.—MILEAGE OPERATED OVER WATER LINES.

GROUPS.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total express mileage operated over water lines.	7,036.00	7,096.00	7,366.00	8,393.50	8,376.50	8,538.50	8,689.50	8,724.50	9,014.50	8,207.50	10,882.00
Group I	3,195.00	3,255.00	3,545.00	3,392.00	3,352.00	3,417.00	3,417.00	3,343.00	3,594.00	3,864.00	5,026.00
II	668.00	668.00	668.00	673.00	696.00	717.00	793.00	958.00	983.00	958.00	1,208.00
III	843.00	843.00	823.00	823.00	823.00	823.00	823.00	801.00	801.00	884.00	1,046.00
V	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	
VI							20.00	20.00			
VII				1.00	1.00	1.00	1.00	1.00	1.00	1.00	
VIII				0.50	0.50	0.50	0.50	0.50	0.50	0.50	
X	2,180.00	2,180.00	2,180.00	3,354.00	3,354.00	3,430.00	3,485.00	3,451.00	3,485.00	2,350.00	3,602.00

TABLE 1.—MILEAGE OPERATED BY EXPRESS COMPANIES OVER RAILWAYS, WATER LINES, AND STAGE LINES DURING THE YEARS 1880-1890, INCLUSIVE—Continued.

Part 3.—BY GROUP TOTALS—Continued.

C.—MILEAGE OPERATED OVER STAGE LINES.

GROUPS.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total express mileage operated over stage lines.	5,131.00	5,526.00	4,898.00	4,065.00	4,295.00	5,084.00	4,367.00	3,765.00	4,207.00	3,752.00	3,055.00
Group I	69.00	69.00	69.00	25.00	25.00					30.00	90.00
II					3.00	3.00	26.00	41.00	29.00	17.00	3.00
III	33.00	58.00	60.00	70.00	55.00	55.00	27.00	30.00	30.00	99.00	61.00
V	110.00	88.00	101.00	101.00	84.00	74.00	74.00	105.00	105.00	115.00	122.00
VI			5.00	5.00	11.00	11.00	36.00	26.00	47.00	32.00	35.00
VII						294.00	200.00				
VIII		44.00	40.00								
X	4,919.00	5,267.00	4,623.00	3,864.00	4,117.00	4,647.00	4,004.00	3,563.00	3,996.00	3,459.00	2,744.00

D.—MILEAGE OPERATED OVER ALL LINES.

GROUPS.	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
Total express mileage operated over all lines.	102,816.75	115,236.28	126,393.01	141,146.88	141,473.19	145,179.64	152,259.33	163,760.66	167,628.00	169,857.16	174,534.51
Group I	10,440.97	10,605.40	11,441.78	12,396.37	11,148.50	11,154.90	11,090.94	11,019.41	11,244.37	12,080.74	13,931.23
II	14,159.23	14,721.77	16,041.55	18,167.37	17,097.09	17,624.34	20,105.20	20,652.59	18,969.48	19,661.96	19,279.78
III	16,009.20	18,008.30	19,416.56	24,875.35	22,036.21	21,497.10	23,124.15	24,549.20	22,209.13	22,794.17	22,869.50
IV	4,607.55	4,790.75	5,112.45	5,449.27	5,723.24	5,821.32	6,273.47	7,428.25	7,579.84	7,998.13	8,525.50
V	7,912.73	8,920.49	9,695.83	10,844.16	11,815.77	12,688.12	12,988.16	14,553.58	15,426.21	16,415.36	16,646.48
VI	23,920.62	25,902.99	28,331.34	29,741.29	31,440.61	30,743.45	32,825.53	34,181.77	39,657.65	37,758.56	37,883.42
VII	2,265.70	2,449.42	4,035.32	3,560.17	4,468.67	5,101.06	5,751.80	6,986.86	7,347.34	7,879.95	8,785.28
VIII	8,784.70	12,558.73	13,328.29	13,319.69	13,802.79	14,248.16	14,073.56	17,617.71	18,345.44	19,342.83	20,154.54
IX	2,707.24	4,002.93	5,657.29	6,660.05	6,651.54	7,729.58	7,887.69	8,828.15	8,759.51	8,945.71	9,088.96
X	12,008.81	13,275.50	13,332.60	16,133.16	17,288.77	18,571.61	18,138.83	17,943.14	18,089.03	16,979.75	17,369.82

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES.

Part 1.—BY COMPANIES IN EACH GROUP.

GROUP I.

A.—MILEAGE OPERATED OVER RAILWAYS.

[The mileage given as operated by express companies over some roads in each group contains a varying amount of mileage lying in other groups.]

ROUTES.	Adams.	American.	Dominion.	Earle & Prew's.	National.	New England Despatch.	New York and Boston Despatch.	United States.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over railways in Group I.	1,464.00	4,997.00	252.00	146.00	430.00	887.00	399.23	240.00	8,815.23	1,953.90	6,861.33
Atlantic and St. Lawrence Railroad Company		166.58							166.58		166.58
Bangor and Piscataquis Railroad Company		95.00							95.00		95.00
Bennington and Rutland Railway Company					58.91				58.91		58.91
Boston and Albany Railroad Company	154.63	342.00				99.00			595.63	253.63	342.00
Boston and Maine Railroad Company	147.00	*a*1,210.03				167.00	12.00		*a*1,536.03	326.00	*a*1,210.03
Bridgton and Saco River Railroad Company		16.00							16.00		16.00
Canadian Pacific Railway Company			*b*252.00						*b*252.00		*b*252.00
Central Vermont Railroad Company	65.00	665.10			116.00				846.10	181.00	665.10
Cheshire Railroad Company		64.01							64.01		64.01
Concord and Montreal Railroad Company		422.75							422.75		422.75
Connecticut River Railroad Company		79.85							79.85		79.85
Fall River, Warren and Providence Railroad Company.				5.79					5.79		5.79
Fitchburg Railroad Company		368.29			255.09				623.38	255.09	368.29
Grafton and Upton Railroad	16.00								16.00		16.00
Housatonic Railroad Company								189.00	189.00		189.00
Knox and Lincoln Railroad		50.00							50.00		50.00
Maine Central Railroad Company		*c*732.80				251.00			*c*983.80	251.00	*c*732.80
Meriden, Waterbury and Connecticut River Railroad Company.								28.20	28.20		28.20
Monadnock Railroad Company		15.80							15.80		15.80
Monson Railroad Company		7.20							7.20		7.20
Montpelier and Wells River Railroad Company		38.00							38.00		38.00
Narragansett Pier Railroad	8.50								8.50		8.50
Newport and Wickford Railroad Company	3.10								3.10		3.10
New York and New England Railroad Company	476.27					201.00			677.27	201.00	476.27
New York, New Haven and Hartford Railroad Company.	453.50	255.09							708.59	182.70	525.89
New York, Providence and Boston Railroad Company.	64.00	64.00		58.56					186.56	64.00	122.56
Old Colony Railroad Company	44.00	136.00		44.00		169.00	387.23		780.23	216.68	563.55
Portland and Rochester Railroad Company		52.00							52.00		52.00
Providence and Springfield Railroad Company				22.80				22.80	45.60	22.80	22.80
Providence, Warren and Bristol Railroad Company.				14.85					14.85		14.85
St. Johnsbury and Lake Champlain Railroad Company.		131.50							131.50		131.50
Sebasticook and Moosehead Railroad Company		8.00							8.00		8.00
Shepaug, Litchfield and Northern Railroad Company.	32.00								32.00		32.00
Somerset Railway Company		31.00							31.00		31.00
Upper Coos Railroad Company		21.00							21.00		21.00
Woodstock Railroad Company		14.00							14.00		14.00
York Harbor and Beach Railroad Company		11.00							11.00		11.00

B.—MILEAGE OPERATED OVER WATER LINES.

ROUTES.	Adams.	American.	Dominion.	Earle & Prew's.	National.	New England Despatch.	New York and Boston Despatch.	United States.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over water lines in Group I.	292.00	2,275.00		218.00		1,407.00	233.00	601.00	5,026.00	1,626.00	3,400.00
Alton Bay Wolfboro Line		18.00							18.00		18.00
Boston and Bangor Steamship Company		290.00				428.00			718.00	290.00	428.00
Boston and Gloucester Steamship Company		30.00							30.00		30.00
Boston, Halifax and Prince Edward Island Steamboat Company.		400.00							400.00		400.00
Bridgeport Steamboat Company								65.00	65.00		65.00
Canada Atlantic Steamship Company		400.00							400.00		400.00
Continental Steamboat Company				30.00					30.00		30.00
Frontier Steamboat Company		30.00							30.00		30.00
International Steamboat Company		635.00				300.00			935.00	300.00	635.00
New Bedford, Marthas Vineyard and Nantucket Steamboat Company.							52.00		52.00		52.00
New England Terminal Company								42.00	42.00		42.00
New Haven Steamboat Company								65.00	65.00		65.00
New London Steamboat Company	35.00								35.00		35.00
Newport and Narragansett Pier Line	9.00								9.00		9.00
Newport and Wickford Steamboat Company	12.00								12.00		12.00
New York and Norwalk Steamboat Company								45.00	45.00		45.00
Norwich and New York Transportation Company	116.00								116.00		116.00
Old Colony Steamboat Company						*d*366.00	181.00	181.00	728.00	543.00	185.00
Portland Steam Packet Company						113.00			113.00		113.00
Portland, Mount Desert and Machias Steamboat Company.		232.00				200.00			432.00	200.00	232.00
Providence and Newport Steamboat Company								30.00	30.00		30.00
Stonington Line	120.00			188.00				173.00	481.00	293.00	188.00
Yarmouth Steamship Company		240.00							240.00		240.00

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a Includes 36.75 miles of line in Canada.
b Includes 85.50 miles of line in Canada.
c Includes 52.63 miles of line in Canada.
d New York to Fall River, 181 miles; New York to New Bedford, 185 miles.

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP I—Continued.

C.—MILEAGE OPERATED OVER STAGE LINES.

ROUTES.	Adams.	American.	Dominion.	Earle & Prew's.	National.	New England Despatch.	New York and Boston Despatch.	United States.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over stage lines in Group I.		90.00							90.00		90.00
Lines in Maine		70.00							70.00		70.00
Lines in Massachusetts		20.00							20.00		20.00

D.—MILEAGE OPERATED OVER ALL LINES.

	Adams.	American.	Dominion.	Earle & Prew's.	National.	New England Despatch.	New York and Boston Despatch.	United States.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total express mileage in Group I	1,756.00	7,362.00	252.00	364.00	430.00	2,294.00	632.23	841.00	13,931.23	3,579.90	10,351.33

GROUP II.

A.—MILEAGE OPERATED OVER RAILWAYS.

ROUTES.	Adams.	American.	Camden and Atlantic.	Long Island.	National.	United States.	Wells, Fargo & Co.'s.	West Jersey.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over railways in Group II.	6,082.00	4,568.00	78.93	352.79	955.00	4,239.00	1,548.00	245.06	18,068.78	646.91	17,421.87
Addison and Pennsylvania Railway Company							46.50		46.50		46.50
Albany and Susquehanna Railroad Company					187.35				187.35		187.35
Allegheny Valley Railroad Company	260.30								260.30		260.30
Annapolis and Baltimore Short Line Railroad Company.						27.75			27.75		27.75
Annapolis, Washington and Baltimore Railroad Company.						20.50			20.50		20.50
Atlantic City Railroad Company						83.46			83.46		83.46
Baltimore and Delaware Bay Railroad Company	50.00								50.00		50.00
Baltimore and Eastern Shore Railroad Company	30.00					30.00			60.00	30.00	30.00
Baltimore and Ohio Railroad Company (east of Ohio river).						1,109.32			1,109.32		1,109.32
Baltimore and Potomac Railroad Company	95.86								95.86		95.86
Baltimore and Sparrow Point Railroad Company	4.70								4.70		4.70
Bangor and Portland Railway Company						32.51			32.51		32.51
Bath and Hammondsport Railroad Company						10.83	9.00		19.83	9.00	10.83
Beech Creek Railroad Company	146.91								146.91		146.91
Bloomsburg and Sullivan Railroad Company						30.00			30.00		30.00
Bradford, Bordell and Kinzua Railroad Company						50.00	62.32		112.32	50.00	62.32
Bradford, Eldred and Cuba Railroad Company						34.29	33.00		67.29	33.00	34.29
Buffalo, Rochester and Pittsburg Railway Company.		284.00							284.00		284.00
Camden and Atlantic Railroad Company	59.00		78.93						137.93	59.00	78.93
Carthage and Adirondack Railroad Company		37.00							37.00		37.00
Catasauqua and Fogelsville Railroad Company						25.50			25.50		25.50
Catskill Mountain Railway Company		19.50							19.50		19.50
Central New England and Western Railroad Company.	164.04	42.00							206.04	42.00	164.04
Central Railroad Company of New Jersey	82.00					662.12			744.12	82.00	662.12
Chataugay Railroad Company					72.82				72.82		72.82
Cooperstown and Charlotte Valley Railroad Company.					16.00				16.00		16.00
Cornwall Railroad Company						12.67			12.67		12.67
Cornwall and Lebanon Railroad Company	22.96								22.96		22.96
Coudersport and Port Allegheny Railroad Company.		17.00							17.00		17.00
Cresson, Clearfield County and New York Short Route Railroad Company.	29.10								29.10		29.10
Cumberland Valley Railroad Company	144.93								144.93		144.93
Delaware and Hudson Canal Company	18.00				158.19				176.19	18.00	158.19
Delaware Bay and Cape May Railroad Company								3.50	3.50		3.50
Delaware, Lackawanna and Western Railroad Company.						780.89			780.89		780.89
Delaware River Railroad Company								19.97	19.97		19.97
Diamond Valley Railroad Company	12.25								12.25		12.25
Elmira, Cortland and Northern Railroad Company		139.00							139.00		139.00
Erie and Wyoming Valley Railroad Company							62.25		62.25		62.25
Fall Brook Coal Company		231.12							231.12		231.12
Fonda, Johnstown and Gloversville Railroad Company.		22.88							22.88		22.88
Gettysburg and Harrisburg Railroad Company	24.60								24.60		24.60
Greenwich and Johnsonville Railway Company					14.65				14.65		14.65
Harrisburg and Potomac Railroad Company	36.90								36.90		36.90
Huntington and Broadtop Mountain Railroad and Coal Company.	64.20								64.20		64.20
Kaaterskill Railroad Company		7.50							7.50		7.50

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP II—Continued.

A.—MILEAGE OPERATED OVER RAILWAYS—Continued.

ROUTES.	Adams.	American.	Camden and Atlantic.	Long Island.	National.	United States.	Wells, Fargo & Co.'s.	West Jersey.	Total operated mileage.	Duplicated mileage.	Net mileage.
Keeseville, Au Sable Chasm and Lake Champlain Railroad Company.					5.64				5.64		5.64
Lackawanna and Southwestern Railroad Company.						20.00			20.00		20.00
Lancaster, Oxford and Southern Railroad Company.	20.00								20.00		20.00
Lebanon Springs Railroad Company					57.10				57.10		57.10
Lehigh and Hudson River Railroad Company							77.20		77.20		77.20
Lehigh Valley Railroad Company	722.00	96.88							818.88		818.88
Long Island Railroad Company				352.79					352.79		352.79
Maryland Central Railway Company	84.40								84.40		84.40
Middleburg and Schoharie Railroad Company					5.75				5.75		5.75
Monongahela River Railroad Company						31.00			31.00		31.00
Montour Railroad Company		11.00							11.00		11.00
Montrose Railway Company	28.00								28.00		28.00
Mont Alto Railroad Company	17.89								17.89		17.89
Newburg, Dutchess and Connecticut Railroad Company.		58.80							58.80		58.80
New Jersey and New York Railroad Company						47.90			47.90		47.90
New York and Canada Railroad Company					94.64				94.64		94.64
New York and Greenwood Lake Railway Company.							43.25		43.25		43.25
New York and Massachusetts Railway Company		34.99							34.99		34.99
New York and Northern Railway Company		61.00							61.00		61.00
New York Central and Hudson River Railroad Company.		1,420.64			148.00				1,568.64	148.00	1,420.64
New York, Lake Erie and Western Railroad Company.							1,037.85		1,037.85		1,037.85
New York, Ontario and Western Railway		424.12							424.12		424.12
New York, Philadelphia and Norfolk Railroad Company.	111.46								111.46		111.46
New York, Susquehanna and Western Railroad Company.		157.28					111.91		269.19	111.91	157.28
Northern Central Railroad Company	372.83								372.83		372.83
Pennsylvania Railroad Company	2,449.24								2,449.24		2,449.24
Pennsylvania and Northwestern Railroad Company.	70.86								70.86		70.86
Pennsylvania, Poughkeepsie and Boston Railroad Company.	95.62								95.62		95.62
Perkiomen Railroad Company						38.50			38.50		38.50
Perry County Railroad Company	11.10								11.10		11.10
Philadelphia and Reading Railroad Company						843.10			843.10		843.10
Philadelphia, Newtown and New York Railroad Company.						20.90			20.90		20.90
Philadelphia, Wilmington and Baltimore Railroad Company.	533.93								533.93		533.93
Port Jervis, Monticello and New York Railroad Company.		41.05							41.05		41.05
Raritan River Railroad Company						15.34			15.34		15.34
Reading and Columbia Railroad Company						47.72			47.72		47.72
Rensselaer and Saratoga Railroad Company					194.86				194.86		194.86
Reynoldsville and Falls Creek Railroad Company		14.50							14.50		14.50
Rockaway Valley Railroad Company						12.00			12.00		12.00
Rome, Watertown and Ogdensburg Railroad Company.		637.00							637.00		637.00
Sharpsville Railroad Company		20.53							20.53		20.53
Silver Lake Railway Company		6.86							6.86		6.86
Sinnemahoning Valley Railroad Company		9.00							9.00		9.00
Skaneateles Railroad Company		5.00							5.00		5.00
Staten Island Rapid Transit Railroad Company						22.40			22.40		22.40
Stewartstown Railroad Company	7.20								7.20		7.20
Stony Clove and Catskill Mountain Railroad Company.		14.00							14.00		14.00
Syracuse and Baldwinsville Railroad Company		6.00							6.00		6.00
Syracuse, Binghamton and New York Railroad Company.						81.00			81.00		81.00
Tioga Railroad							64.72		64.72		64.72
Tonawanda Valley and Cuba Railroad Company						30.00			30.00		30.00
Tuckerton Railroad Company	49.00								49.00		49.00
Ulster and Delaware Railroad Company		77.61							77.61		77.61
Union Transportation Company	24.47								24.47		24.47
Wallkill Valley Railroad Company		32.88							32.88		32.88
Waynesburg and Washington Railroad Company	28.15								28.15		28.15
Western Maryland Railroad Company	124.10								124.10		124.10
Western New York and Pennsylvania Railroad Company.		638.86							638.86		638.86
West Jersey Railroad Company	64.00							221.59	285.59	64.00	221.59
Williamsport and North Branch Railroad Company.						27.00			27.00		27.00
Wilmington and Northern Railroad Company						92.30			92.30		92.30
Wilkesbarre and Western Railway Company	22.00								22.00		22.00

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP II—Continued.

B.—MILEAGE OPERATED OVER WATER LINES.

ROUTES.	Adams.	American.	Camden and Atlantic.	Long Island.	National.	United States.	Wells, Fargo & Co.'s.	West Jersey.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over water lines in Group II.	399.00	288.00	....	....	231.00	290.00	....	....	1,208.00	82.00	1,126.00
Baltimore Steam Packet Company	200.00	....	....	....	....	....	....	....	200.00	....	200.00
Canandaigua lake steamers	....	25.00	....	....	....	....	....	....	25.00	....	25.00
Cape Vincent and Kingston Line	....	20.00	....	....	....	....	....	....	20.00	....	20.00
Cayuga Lake Steamboat Company	....	....	....	....	....	40.00	....	....	40.00	....	40.00
Charlotte and Point Hope Line	....	65.00	....	....	....	....	....	....	65.00	....	65.00
Chester River Steamboat Company	....	....	....	....	....	65.00	....	....	65.00	....	65.00
Choptank Steamboat Company	....	....	....	....	....	100.00	....	....	100.00	....	100.00
Keuka Lake Steamboat Company	23.00	22.00	....	....	....	20.00	....	....	65.00	42.00	23.00
Lake Champlain Transportation Company	....	....	....	....	88.00	....	....	....	88.00	....	88.00
Maryland Steam Packet Company	100.00	....	....	....	....	....	....	....	100.00	....	100.00
New York, Philadelphia and Norfolk Railroad Company.	36.00	....	....	....	....	....	....	....	36.00	....	36.00
Ogdensburg and Prescott Line	....	2.00	....	....	....	....	....	....	2.00	....	2.00
People's Line steamers	....	....	....	....	143.00	....	....	....	143.00	....	143.00
Rondout Line steamers	....	90.00	....	....	....	....	....	....	90.00	....	90.00
Salem and Philadelphia Steamboat line	....	....	....	....	....	65.00	....	....	65.00	....	65.00
Seneca Lake steamers	40.00	40.00	....	....	....	....	....	....	80.00	40.00	40.00
Thousand Islands Steamboat Company	....	24.00	....	....	....	....	....	....	24.00	....	24.00

C.—MILEAGE OPERATED OVER STAGE LINES.

ROUTES.	Adams.	American.	Camden and Atlantic.	Long Island.	National.	United States.	Wells, Fargo & Co.'s.	West Jersey.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over stage lines in Group II.	....	3.00	....	....	....	....	....	....	3.00	....	3.00
Lines in New York	....	3.00	....	....	....	....	....	....	3.00	....	3.00

D.—MILEAGE OPERATED OVER ALL LINES.

ROUTES.	Adams.	American.	Camden and Atlantic.	Long Island.	National.	United States.	Wells, Fargo & Co.'s.	West Jersey.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total express mileage in Group II	6,481.00	4,859.00	78.93	352.79	1,186.00	4,529.00	1,548.00	245.06	19,279.78	728.91	18,550.87

GROUP III.

A.—MILEAGE OPERATED OVER RAILWAYS.

ROUTES.	Adams.	American.	Cincinnati, Georgetown and Portsmouth.	Pacific.	United States.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over railways in Group III	5,389.00	9,272.75	42.00	479.00	5,129.75	1,450.00	21,762.50	1,258.05	20,504.45
Baltimore and Ohio Railroad Company (west of Ohio river)	....	....	....	....	577.00	....	577.00	....	577.00
Baltimore and Ohio Southwestern Railroad Company	....	....	....	....	282.03	....	282.03	....	282.03
Bellaire, Zanesville and Cincinnati Railroad Company	110.75	....	....	....	....	....	110.75	....	110.75
Chautauqua Lake Railway Company	....	23.85	....	....	....	....	23.85	....	23.85
Chicago and Atlantic Railway Company	....	....	....	....	....	268.40	268.40	....	268.40
Chicago and Grand Trunk Railway Company	....	335.27	....	....	....	....	335.27	....	335.27
Chicago and West Michigan Railway Company	....	408.40	....	....	....	....	408.40	....	408.40
Chicago, Kalamazoo and Saginaw Railway Company	....	44.20	....	....	....	....	44.20	....	44.20
Chicago, St. Louis and Pittsburg Railroad Company	532.15	....	....	....	....	....	532.15	....	532.15
Cincinnati and Muskingum Valley Railway Company	148.45	....	....	....	....	....	148.45	....	148.45
Cincinnati, Georgetown and Portsmouth Railroad Company	....	....	42.00	....	....	....	42.00	....	42.00
Cincinnati, Hamilton and Dayton Railroad Company	....	13.00	....	....	346.80	....	359.80	13.00	346.80
Cincinnati, Jackson and Mackinaw Railroad Company	....	349.10	....	....	....	....	349.10	....	349.10
Cincinnati, Lebanon and Northern Railway Company	....	37.65	....	....	....	....	37.65	....	37.65
Cincinnati Northwestern Railroad Company	....	....	....	....	6.50	....	6.50	....	6.50
Cincinnati, Saginaw and Mackinaw Railroad Company	....	52.97	....	....	....	....	52.97	....	52.97
Cincinnati, Sandusky and Cleveland Railway Company	....	....	....	....	190.81	....	190.81	....	190.81
Cincinnati, Wabash and Michigan Railway Company	....	....	....	....	166.00	....	166.00	....	166.00
Cleveland and Canton Railroad Company	....	196.45	....	....	....	....	196.45	....	196.45
Cleveland and Marietta Railroad Company	....	104.70	....	....	....	....	104.70	....	104.70
Cleveland and Western Railroad Company	....	....	....	....	56.00	....	56.00	....	56.00
Cleveland, Akron and Columbus Railway Company	193.85	....	....	....	....	....	193.85	....	193.85
Cleveland, Cincinnati, Chicago and St. Louis Railway Company (east of Terre Haute).	462.00	810.55	....	....	....	....	1,272.55	462.00	810.55
Cleveland, Lorain and Wheeling Railroad Company	....	164.30	....	....	....	....	164.30	....	164.30
Columbus and Cincinnati Midland Railroad Company	....	....	....	....	71.20	....	71.20	....	71.20
Columbus, Hocking Valley and Toledo Railway Company	317.27	123.00	....	....	....	....	440.27	123.00	317.27
Columbus, Shawnee and Hocking Railway Company	66.30	....	....	....	138.50	....	204.80	66.30	138.50
Dayton and Union Railway Company	....	....	....	....	46.69	....	46.69	....	46.69
Dayton, Fort Wayne and Chicago Railway Company	....	99.00	....	....	260.70	....	359.70	99.00	260.70
Detroit, Bay City and Alpena Railroad Company	....	232.98	....	....	....	....	232.98	....	232.98
Detroit, Grand Haven and Milwaukee Railway Company	....	189.00	....	....	....	....	189.00	....	189.00
Detroit, Lansing and Northern Railroad Company	....	323.68	....	....	....	....	323.68	....	323.68
Dunkirk, Allegheny Valley and Pittsburg Railroad Company	....	90.60	....	....	....	....	90.60	....	90.60
Evansville and Terre Haute Railroad Company	164.12	....	....	....	....	....	164.12	....	164.12
Findlay, Fort Wayne and Western Railroad Company	....	....	....	....	23.30	....	23.30	....	23.30

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP III—Continued.

A.—MILEAGE OPERATED OVER RAILWAYS—Continued.

ROUTES.	Adams.	American.	Cincinnati, Georgetown and Portsmouth.	Pacific.	United States.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Flint and Pere Marquette Railroad Company		649.94					649.94		649.94
Fort Wayne, Cincinnati and Louisville Railway Company		132.70					132.70		132.70
Frankfort and Southeastern Railroad Company		26.95					26.95		26.95
Grand Rapids and Indiana Railroad Company	584.17						584.17		584.17
Grand Trunk Railway Company		105.60					105.60		105.60
Hancock and Calumet Railroad Company		20.36					20.36		20.36
Indiana and Illinois Southern Railroad Company	90.00						90.00		90.00
Indiana, Illinois and Iowa Railroad Company					118.00		118.00		118.00
Indianapolis, Decatur and Western Railway Company (in Indiana)		76.75			76.75		153.50	76.75	76.75
Lake Erie and Western Railroad Company					585.84		585.84		585.84
Lake Erie, Alliance and Southern Railway Company	61.00						61.00		61.00
Lake Shore and Michigan Southern Railway Company		339.00			1,338.06		1,677.06	339.00	1,338.06
Lake Side and Marblehead Railroad Company					7.35		7.35		7.35
Louisville, Evansville and St. Louis Consolidated Railroad Company.					297.02		297.02		297.02
Louisville, New Albany and Chicago Railway Company		537.07					537.07		537.07
Louisville, New Albany and Corydon Railroad Company					12.50		12.50		12.50
Manistee and Northeastern Railroad Company		69.71					69.71		69.71
Meadville and Linesville Railway Company	20.50						20.50		20.50
Michigan Central Railroad Company		a1,529.66					a1,529.66		a1,529.66
Midland Railway Company of Indiana					74.00		74.00		74.00
Mineral Range Railroad Company		17.00					17.00		17.00
New York, Chicago and St. Louis Railroad Company		523.02					523.02		523.02
New York, Lake Erie and Western Railroad Company (west of Salamanca).						596.50	596.50		596.50
Ohio and Mississippi Railroad Company (east of Vincennes)	252.96						252.96		252.96
Ohio and Northwestern Railroad Company	111.50						111.50		111.50
Ohio Southern Railroad Company					118.25		118.25		118.25
Pennsylvania Company	1,363.48						1,363.48		1,363.48
Pittsburg and Lake Erie Railroad Company		163.72					163.72		163.72
Pittsburg and Western Railway Company					56.00	289.18	345.18		345.18
Pittsburg, Cincinnati and St. Louis Railroad Company	465.46						465.46		465.46
Pittsburg, Marion and Chicago Railroad Company	25.00						25.00		25.00
Pittsburg, Shenango and Lake Erie Railroad Company	83.40						83.40		83.40
Pontiac, Oxford and Northern Railroad Company		100.20					100.20		100.20
Saginaw, Tuscola and Huron Railroad Company		66.57					66.57		66.57
St. Clairsville and Northern Railway Company		3.40					3.40		3.40
St. Joseph Valley Railway Company		10.00					10.00		10.00
Scioto Valley and New England Railroad Company	128.74						128.74		128.74
Terre Haute and Indianapolis Railroad Company (in Indiana)	79.00	262.60					341.60	79.00	262.60
Tionesta Valley Railroad Company	40.00						40.00		40.00
Toledo and Ohio Central Railway Company					235.45		235.45		235.45
Toledo and Ohio Central Extension Railroad Company					45.00		45.00		45.00
Toledo and South Haven Railroad Company		37.00					37.00		37.00
Toledo, Ann Arbor and North Michigan Railway Company		286.00					286.00		286.00
Toledo, Columbus and Cincinnati Railroad Company						72.37	72.37		72.37
Toledo, Saginaw and Muskegon Railroad Company		116.00					116.00		116.00
Toledo, St. Louis and Kansas City Railroad Company		450.72					450.72		450.72
Valley Railroad Company of Ohio		87.68					87.68		87.68
Wabash Railroad Company (east of Danville, Ill.)				479.00			479.00		479.00
Warren and Farnsworth Railroad Company	15.26						15.26		15.26
Wheeling and Lake Erie Railway Company						223.55	223.55		223.55
White Water Railroad Company		62.40					62.40		62.40
Zanesville and Ohio River Railroad Company	73.64						73.64		73.64

a Includes 300.30 miles of line in Canada.

B.—MILEAGE OPERATED OVER WATER LINES.

ROUTES.	Adams.	American.	Cincinnati, Georgetown and Portsmouth.	Pacific.	United States.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over water lines in Group III	746.00	300.00					1,046.00		1,046.00
Detroit, Grand Haven and Milwaukee Railway Company		85.00					85.00		85.00
Detroit and Cleveland Navigation Company		120.00					120.00		120.00
Lake Michigan and Lake Superior Transportation Company		95.00					95.00		95.00
Pittsburg and Cairo lines	746.00						746.00		746.00

C.—MILEAGE OPERATED OVER STAGE LINES.

ROUTES.	Adams.	American.	Cincinnati, Georgetown and Portsmouth.	Pacific.	United States.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over stage lines in Group III	55.00	6.00					61.00		61.00
Lines in Ohio	19.00	6.00					25.00		25.00
Lines in Indiana	9.00						9.00		9.00
Lines in Michigan	27.00						27.00		27.00

D.—MILEAGE OPERATED OVER ALL LINES.

ROUTES.	Adams.	American.	Cincinnati, Georgetown and Portsmouth.	Pacific.	United States.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total express mileage in Group III	6,190.00	9,578.75	42.00	479.00	5,129.75	1,450.00	22,869.50	1,258.05	21,611.45

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP IV.

A.—MILEAGE OPERATED OVER RAILWAYS.

ROUTES.	Adams.	Southern.	United States.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over railways in Group IV	1,550.50	6,435.00	540.00	8,525.50	51.57	8,473.93
Atlantic and Danville Railway Company		218.00		218.00		218.00
Atlantic and North Carolina Railroad Company		95.00		95.00		95.00
Atlantic Coast Line Association		952.14		952.14		952.14
Baltimore and Ohio Railroad Company (south of Harper's Ferry, W. Va.)			101.63	101.63		101.63
Barnwell Railway Company		9.00		9.00		9.00
Bishopville Railroad Company		15.00		15.00		15.00
Blackville, Alston and Newberry Railroad Company		30.00		30.00		30.00
Cape Fear and Yadkin Valley Railway Company		338.05		338.05		338.05
Carolina Central Railroad Company		267.00		267.00		267.00
Charleston and Savannah Railway Company		120.60		120.60		120.60
Charleston, Cincinnati and Chicago Railroad Company		156.29		156.29		156.29
Charleston, Sumter and Northern Railroad Company		70.75		70.75		70.75
Chesapeake and Ohio Railway Company (east of Huntington, W. Va.)	510.00		311.67	821.67	51.57	770.10
Danville and New River Railroad Company		83.00		83.00		83.00
Durham and Northern Railway Company		41.00		41.00		41.00
Georgetown and Western Railroad Company		36.00		36.00		36.00
Georgia, Carolina and Northern Railway Company		62.02		62.02		62.02
Green Pond, Walterboro and Branchville Railway Company		12.00		12.00		12.00
Jamesville and Washington Railroad Company		22.57		22.57		22.57
Kanawha and Michigan Railroad Company (south of Ohio river)			64.70	64.70		64.70
Lynchburg and Durham Railroad Company		84.00		84.00		84.00
Norfolk and Virginia Beach Railroad Company		17.90		17.90		17.90
Norfolk and Western Railroad Company		559.00		559.00		559.00
Norfolk Southern Railroad Company		74.02		74.02		74.02
Ohio River Railroad Company	215.00			215.00		215.00
Palmetto Railroad Company		18.20		18.20		18.20
Port Royal and Augusta Railway Company		112.00		112.00		112.00
Port Royal and Western Carolina Railway Company		228.60		228.60		228.60
Raleigh and Augusta Air Line Railroad Company		129.27		129.27		129.27
Raleigh and Gaston Railroad Company		107.00		107.00		107.00
Richmond and Danville Railroad Company (east of Atlanta, Ga.)	335.50	2,123.00		2,458.50		2,458.50
Richmond, Fredericksburg and Potomac Railroad Company	81.70			81.70		81.70
Seaboard and Roanoke Railroad Company		113.60		113.60		113.60
Shenandoah Valley Railroad Company	246.12			246.12		246.12
South Atlantic and Ohio Railroad Company		54.82		54.82		54.82
South Carolina Railway Company		246.00		246.00		246.00
Valley Railroad Company of Virginia			62.00	62.00		62.00
Washington Southern Railway Company	33.60			33.60		33.60
West Virginia Central and Pittsburg Railway Company	128.58			128.58		128.58
Wilmington, Chadbourne and Conway Railroad Company		39.17		39.17		39.17

D.—MILEAGE OPERATED OVER ALL LINES. (a)

Total express mileage in Group IV	1,550.50	6,435.00	540.00	8,525.50	51.57	8,473.93

a No mileage over water and stage lines in this group.

GROUP V.

A.—MILEAGE OPERATED OVER RAILWAYS.

ROUTES.	Adams.	Pacific.	Southern.	United States.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over railways in Group V	1,507.00	687.98	12,898.00	1,431.50	16,524.84	1,060.84	15,463.64
Alabama and Vicksburg Railway Company				142.60	142.60		142.60
Alabama Great Southern Railroad Company				295.00	295.00		295.00
Alabama Midland Railroad Company			207.72		207.72		207.72
Anniston and Atlantic Railroad Company			52.36		52.36		52.36
Anniston and Cincinnati Railroad Company				35.00	35.00		35.00
Atlanta and Florida Railroad Company			105.00		105.00		105.00
Atlanta and West Point Railroad Company			86.11		86.11		86.11
Atlantic and Western Railroad Company (of Florida)			30.00		30.00		30.00
Augusta, Gibson and Sandersville Railroad Company			80.00		80.00		80.00
Birmingham Mineral Railroad Company			151.01		151.01		151.01
Birmingham, Sheffield and Tennessee River Railway Company			106.00		106.00		106.00
Blue Ridge and Atlantic Railroad Company			20.90		20.90		20.90
Brunswick and Western Railroad Company			171.00		171.00		171.00
Central Railroad and Banking Company of Georgia			1,317.46		1,317.46		1,317.46
Chattanooga, Rome and Columbus Railroad Company			176.00	140.00	316.00	140.00	176.00
Chesapeake and Nashville Railway Company	35.87				35.87		35.87
Chesapeake and Ohio Railway Company (west of Huntington, W. Va.)	161.50				161.50		161.50
Chesapeake, Ohio and Southwestern Railroad Company			398.48		398.48		398.48
Cincinnati and Southeastern Railway Company	17.00				17.00		17.00
Cincinnati, New Orleans and Texas Pacific Railway Company				336.00	336.00		336.00

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP V—Continued.

A.—MILEAGE OPERATED OVER RAILWAYS—Continued.

ROUTES.	Adams.	Pacific.	Southern.	United States.	Total operated mileage.	Duplicated mileage.	Net mileage.
Covington and Macon Railroad Company			107.00		107.00		107.00
East and West Railroad Company of Alabama			117.60		117.60		117.60
East Tennessee, Virginia and Georgia Railway Company			1,197.50	68.00	1,265.50	68.00	1,197.50
Elizabethtown, Lexington and Big Sandy Railroad Company	139.69				139.69		139.69
Florida Central and Peninsular Railroad Company			598.00		598.00		598.00
Florida Southern Railway Company (including Charlotte Harbor division)			245.51		245.51		245.51
Georgia Railroad Company			307.00		307.00		307.00
Georgia Midland and Gulf Railroad Company			99.20		99.20		99.20
Georgia Southern and Florida Railroad Company			285.00		285.00		285.00
Illinois Central Railroad Company (south of Ohio river)			894.41		894.41		894.41
Jacksonville, St. Augustine and Halifax River Railway			37.03		37.03		37.03
Jacksonville, Tampa and Key West Railway Company			200.00		200.00		200.00
Kansas City, Memphis and Birmingham Railroad Company			276.57		276.57		276.57
Kentucky Central Railway Company	253.81				253.81		253.81
Kentucky Midland Railway Company				40.00	40.00		40.00
Kentucky Union Railway Company	70.00				70.00		70.00
Knoxville and Ohio Railroad Company			60.00		60.00		60.00
Knoxville, Cumberland Gap and Louisville Railroad Company			73.00		73.00		73.00
Louisville and Nashville Railroad Company (south of Ohio river)	752.84		1,342.48		2,095.32	752.84	1,342.48
Louisville and Wadley Railroad Company			10.00		10.00		10.00
Louisville, New Orleans and Texas Railway Company		656.98	100.00		756.98	100.00	656.98
Louisville, St. Louis and Texas Railway Company				142.00	142.00		142.00
Louisville Southern Railway Company				37.00	37.00		37.00
Memphis and Charleston Railroad Company			330.00		330.00		330.00
Mobile and Birmingham Railway Company			163.00		163.00		163.00
Mobile and Northwestern Railroad Company		31.00			31.00		31.00
Mobile and Ohio Railroad Company (south of Cairo, Ill.)			526.00		526.00		526.00
Nashville and Knoxville Railroad Company			48.00		48.00		48.00
Nashville, Chattanooga and St. Louis Railway Company			652.17		652.17		652.17
New Orleans and Northeastern Railroad Company				195.90	195.90		195.90
Ohio and Big Sandy Railroad Company	48.29				48.29		48.29
Ohio Valley Railway Company			108.13		108.13		108.13
Orange Belt Railway Company			152.30		152.30		152.30
Owensboro, Falls of Rough and Green River Railroad	28.00				28.00		28.00
Richmond and Danville Railroad Company (west of Atlanta, Ga.)			566.39		566.39		566.39
Rome Railroad (of Georgia)			22.00		22.00		22.00
Sandersville and Tennille Railway Company			3.50		3.50		3.50
Savannah, Americus and Montgomery Railway Company			173.00		173.00		173.00
Savannah, Florida and Western Railway Company			569.00		569.00		569.00
South Florida Railroad Company			214.96		214.96		214.96
Sylvania Railroad Company			15.00		15.00		15.00
Talladega and Coosa Valley Railroad Company			24.90		24.90		24.90
Tavares and Gulf Railroad Company			28.00		28.00		28.00
Tavares, Orlando and Atlantic Railroad Company			33.20		33.20		33.20
Tennessee Midland Railroad Company			136.00		136.00		136.00
Troy and Tiptonville Railroad Company			4.60		4.60		4.60
Tuskegee Railroad Company			5.50		5.50		5.50
Western and Atlantic Railroad Company			138.00		138.00		138.00
Western Railway Company of Alabama			132.01		132.01		132.01

C.—MILEAGE OPERATED OVER STAGE LINES.

ROUTES.	Adams.	Pacific.	Southern.	United States.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over stage lines in Group V	122.00				122.00		122.00
Lines in Kentucky	122.00				122.00		122.00

D.—MILEAGE OPERATED OVER ALL LINES. (*a*)

ROUTES.	Adams.	Pacific.	Southern.	United States.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total express mileage in Group V	1,629.00	687.98	12,898.00	1,431.50	16,646.48	1,060.84	15,585.64

a No mileage over water lines in this group.

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP VI.

A.—MILEAGE OPERATED OVER RAILWAYS.

ROUTES.	Adams.	American.	Northern Pacific.	Pacific.	Southern.	United States.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over railways in Group VI	5,103.00	20,540.03	2,388.14	1,951.00	152.00	6,986.25	728.00	37,848.42	745.36	37,103.06
Abbotsford and Northeastern Railroad Company			15.00					15.00		15.00
Atchison, Topeka and Santa Fe Railroad Company (east of Kansas city, Mo).							613.75	613.75		613.75
Burlington, Cedar Rapids and Northern Railway Company						1,046.40		1,046.40		1,046.40
Cedar Rapids and Marion Railway Company		6.00						6.00		6.00
Centralia and Chester Railroad Company	8.50							8.50		8.50
Centreville, Moravia and Albia Railroad Company						24.10		24.10		24.10
Chicago and Alton Railroad Company						848.68		848.68		848.68
Chicago and Eastern Illinois Railway Company		435.75						435.75		435.75
Chicago and Iowa Railroad Company		77.36						77.36		77.36
Chicago and Northwestern Railway Company		4,218.68				85.00		4,303.68	85.00	4,218.68
Chicago and Ohio River Railroad Company		86.00						86.00		86.00
Chicago, Burlington and Kansas City Railway Company		220.10						220.10		220.10
Chicago, Burlington and Northern Railroad Company of Wisconsin and Minnesota.		371.11						371.11		371.11
Chicago, Burlington and Quincy Railroad Company (east of Missouri river).		2,171.70					114.25	2,285.95	114.25	2,171.70
Chicago, Fort Madison and Des Moines Railway Company		45.00						45.00		45.00
Chicago, Iowa and Dakota Railway Company		26.50						26.50		26.50
Chicago, Milwaukee and St. Paul Railway Company	2,910.00	2,937.00						5,847.00	161.08	5,685.92
Chicago, Peoria and St. Louis Railway Company	120.00							120.00		120.00
Chicago, Rock Island and Pacific Railway Company (east of Missouri river).						1,588.80		1,588.80		1,588.80
Chicago, St. Paul and Kansas City Railway Company						846.55		846.55		846.55
Chicago, St. Paul, Minneapolis and Omaha Railway Company (east of Missouri river).		1,148.21						1,148.21		1,148.21
Cleveland, Cincinnati, Chicago and St. Louis Railway Company (west of Terre Haute).	213.68	270.00						483.68		483.68
Des Moines and Kansas City Railway Company		112.00						112.00		112.00
Des Moines and Northern Railway Company						41.61		41.61		41.61
Des Moines and Northwestern Railway Company						114.00		114.00		114.00
Dubuque and Sioux City Railroad Company		599.59						599.59		599.59
Duluth and Iron Range Railroad Company						127.05		127.05		127.05
Duluth, Red Wing and Southern Railway Company		24.63						24.63		24.63
Duluth, South Shore and Atlantic Railway Company		558.77						558.77		558.77
Eastern Railway Company of Minnesota		185.26						185.26		185.26
Elgin, Joliet and Eastern Railway Company						130.00		130.00		130.00
Fulton County Narrow Gauge Railway Company		61.00						61.00		61.00
Grand Tower and Carbondale Railroad	32.90							32.90		32.90
Great Northern Railway Company (east of Minot, N. D.)		2,211.95						2,211.95		2,211.95
Green Bay, Winona and St. Paul Railway Company						249.60		249.60		249.60
Hannibal and St. Joseph Railroad Company		295.24						295.24		295.24
Humeston and Shenandoah Railroad Company		112.53						112.53		112.53
Illinois Central Railroad Company (north of Ohio river)		1,381.18						1,381.18		1,381.18
Indianapolis, Decatur and Western Railway Company (in Illinois).		75.76				75.76		151.52	75.76	75.76
Iowa Central Railway Company						488.40		488.40		488.40
Jacksonville Southeastern Railway Company	134.30							134.30		134.30
Kankakee and Seneca Railroad Company		42.08						42.08		42.08
Kansas City, St. Joseph and Council Bluffs Railroad Company		307.99						307.99		307.99
Keokuk and Western Railroad				147.70				147.70		147.70
Litchfield, Carrollton and Western Railroad Company	51.65							51.65		51.65
Louisville and Nashville Railroad Company (north of Ohio river).	208.00							208.00		208.00
Mason City and Fort Dodge Railroad Company		92.00						92.00		92.00
Milwaukee and Northern Railroad Company		330.45						330.45		330.45
Milwaukee, Lake Shore and Western Railway Company						623.00		623.00		623.00
Minneapolis and St. Louis Railway Company						367.70		367.70		367.70
Minneapolis, St. Paul and Sault Ste. Marie Railway Company.		805.35						805.35		805.35
Mobile and Ohio Railroad Company (north of Cairo)					152.00			152.00		152.00
Northern Pacific Railroad Company (east of Montana)			1,596.14					1,596.14		1,596.14
Ohio and Mississippi Railway Company (west of Vincennes)	375.52							375.52		375.52
Omaha and St. Louis Railway Company				145.00				145.00		145.00
Ottumwa and Kirkville Railway Company		11.66						11.66		11.66
Pawnee Railroad Company		6.61						6.61		6.61
Peoria and Pekin Union Railroad Company		18.00						18.00		18.00
Peoria, Decatur and Evansville Railway Company	114.00	143.48						257.48		257.48
Quincy, Omaha and Kansas City Railway Company				137.53				137.53		137.53
Rock Island and Peoria Railway Company[1]						113.00		113.00		113.00
St. Louis and Chicago Railway Company		45.00						45.00		45.00
St. Louis and Hannibal Railway Company		81.75		81.75				163.50	81.75	81.75
St. Louis, Alton and Springfield Railroad Company		96.00		96.00				192.00	96.00	96.00
St. Louis, Alton and Terre Haute Railway Company	239.04							239.04		239.04
St. Louis, Keokuk and Northwestern Railway Company		227.80						227.80		227.80
St. Paul and Duluth Railroad Company	247.75							247.75		247.75
Sault Ste. Marie and Southwestern Railway Company		37.00						37.00		37.00
Sioux City and Northern Railway Company		96.00						96.00		96.00
Sioux City and Pacific Railroad		107.42						107.42		107.42

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP VI—Continued.

A.—MILEAGE OPERATED OVER RAILWAYS—Continued.

ROUTES.	Adams.	American.	Northern Pacific.	Pacific.	Southern.	United States.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Tabor and Northern Railroad Company		8.79						8.79		8.79
Terre Haute and Indianapolis Railroad Company (in Illinois)	158.30							158.30		158.30
Terre Haute and Peoria Railroad Company		172.90						172.90		172.90
Toledo, Peoria and Western Railroad Company	247.10							247.10		247.10
Wabash Railroad Company (west of Danville, Ill.)		131.52		1,343.02				1,474.54	131.52	1,343.02
Wabash, Chester and Western Railroad Company	42.26							42.26		42.26
Wilmar and Sioux Falls Railway Company		146.91						146.91		146.91
Wisconsin Central Railroad Company			777.00					777.00		777.00
Wisconsin, Minnesota and Pacific Railway Company						216.60		216.60		216.60

C.—MILEAGE OPERATED OVER STAGE LINES.

ROUTES.	Adams.	American.	Northern Pacific.	Pacific.	Southern.	United States.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over stage lines in Group VI	4.00	31.00						35.00		35.00
Lines in Iowa		26.00						26.00		26.00
Lines in Illinois	4.00							4.00		4.00
Lines in Missouri		5.00						5.00		5.00

D.—MILEAGE OPERATED OVER ALL LINES. (*a*)

ROUTES.	Adams.	American.	Northern Pacific.	Pacific.	Southern.	United States.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total express mileage in Group VI	5,107.00	20,571.03	2,388.14	1,951.00	152.00	6,986.25	728.00	37,883.42	745.36	37,138.06

a No mileage over water lines in this group.

GROUP VII.

A.—MILEAGE OPERATED OVER RAILWAYS.

ROUTES.	American.	Northern Pacific.	Pacific.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over railways in Group VII	755.22	1,228.86	2,305.49	4,495.71	8,785.28		8,785.28
Carbon Cut-off Railroad Company			19.17		19.17		19.17
Chicago, Burlington and Quincy Railroad Company (west of Missouri river)				2,955.82	2,955.82		2,955.82
Chicago, St. Paul, Minneapolis and Omaha Railway Company (west of Missouri river.)				241.12	241.12		241.12
Denver and Boulder Valley Railroad Company			26.97		26.97		26.97
Fremont, Elkhorn and Missouri Valley Railroad Company				1,298.77	1,298.77		1,298.77
Great Northern Railway Company (west of Minot, N. Dak.)	562.72				562.72		562.72
Kansas City and Omaha Railroad Company			193.69		193.69		193.69
Laramie, North Park and Pacific Railroad and Telegraph Company			13.19		13.19		13.19
Montana Central Railway Company	192.50				192.50		192.50
Montana Union Railway Company			72.22		72.22		72.22
Northern Pacific Railroad Company (in Montana and Idaho)		1,228.86			1,228.86		1,228.86
Omaha and Republican Valley Railroad Company			576.33		576.33		576.33
St. Joseph and Grand Island Railroad Company			252.52		252.52		252.52
Union Pacific Railway Company (north of Kansas)			1,151.40		1,151.40		1,151.40

D.—MILEAGE OPERATED OVER ALL LINES. (*a*)

ROUTES.	American.	Northern Pacific.	Pacific.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total express mileage in Group VII	755.22	1,228.86	2,305.49	4,495.71	8,785.28		8,785.28

a No mileage over water and stage lines in this group.

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP VIII.

A.—MILEAGE OPERATED OVER RAILWAYS.

ROUTES.	Adams.	Denver and Rio Grande.	Pacific.	Southern.	United States.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over railways in Group VIII	2,205.00	1,687.00	9,101.23	1,201.00	1,765.00	4,195.31	20,154.54	153.68	20,000.86
Arkansas Midland Railway Company				48.70			48.70		48.70
Atchison, Topeka and Santa Fe Railroad Company (west of Missouri river).						3,968.44	3,968.44		3,968.44
Atlantic and Pacific Railroad Company (Central division)						112.05	112.05		112.05
Cape Girardeau Southwestern Railway Company (of Missouri)	104.38						104.38		104.38
Central Branch Union Pacific Railroad Company			388.00				388.00		388.00
Chicago, Rock Island and Pacific Railway Company (west of Missouri river).					1,733.00		1,733.00		1,733.00
Choctaw Coal and Railway Company	31.00						31.00		31.00
Colorado Midland Railway Company		287.70					287.70		287.70
Current River Railroad Company				81.95			81.95		81.95
Denver and Rio Grande Railroad Company		1,399.30					1,399.30		1,399.30
Denver, Leadville and Gunnison Railway Company			324.03				324.03		324.03
Eureka Springs Railway Company (Arkansas and Missouri)	18.50						18.50		18.50
Fort Worth and Rio Grande Railway Company			90.92				90.92		90.92
Hutchinson and Southern Railroad Company					32.00		32.00		32.00
Junction City and Fort Kearney Railway Company			87.80				87.80		87.80
Kansas Central Railroad Company			166.22				166.22		166.22
Kansas City and Southern Railway Company			115.00				115.00		115.00
Kansas City, Clinton and Springfield Railway Company	162.63						162.63		162.63
Kansas City, Fort Scott and Memphis Railroad Company	399.73			293.30			693.03	22.43	670.60
Kansas City, Fort Smith and Southern Railway Company	34.10						34.10		34.10
Kansas City, Wyandotte and Northwestern Railroad Company			234.80				234.80		234.80
Leavenworth, Topeka and Southwestern Railway Company			56.08				56.08		56.08
Little Rock and Memphis Railroad Company			131.25	131.25			262.50	131.25	131.25
Manhattan, Alma and Burlingame Railway Company						56.62	56.62		56.62
Missouri, Kansas and Texas Railway Company (north of Denison, Tex.)			898.58				898.58		898.58
Missouri Pacific Railway Company			3,119.00				3,119.00		3,119.00
St. Louis and San Francisco Railway Company	1,329.47						1,329.47		1,239.47
St. Louis, Arkansas and Texas Railway Company (in Arkansas and Missouri).				581.80			581.80		581.80
St. Louis, Iron Mountain and Southern Railway Company			1,545.00				1,545.00		1,545.00
St. Louis, Kansas City and Colorado Railroad Company						58.20	58.20		58.20
Salina and Southwestern Railway Company			63.15				63.15		63.15
Solomon Railroad Company			57.04				57.04		57.04
South Park and Leadville Short Line Railroad Company			7.37				7.37		7.37
Union Pacific Railway Company (in Kansas and Colorado)			674.87				674.87		674.87
Union Pacific, Denver and Gulf Railway Company			916.68				916.68		916.68
Union Pacific, Lincoln and Colorado Railway Company			225.44				225.44		225.44
White and Black River Valley Railway Company				64.00			64.00		64.00
Wichita and Western Railway Company	125.19						125.19		125.19

D.—MILEAGE OPERATED OVER ALL LINES. (*a*)

Total express mileage in Group VIII	2,205.00	1,687.00	9,101.23	1,201.00	1,765.00	4,195.31	20,154.54	153.68	20,000.86

a No mileage over water and stage lines in this group.

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP IX.

A.—MILEAGE OPERATED OVER RAILWAYS.

ROUTES.	Pacific.	Southern.	United States.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over railways in Group IX	4,562.96	1,028.00	256.00	3,242.00	9,088.96	54.00	9,034.96
Austin and Northwestern Railroad Company	76.00				76.00		76.00
East Louisiana Railroad Company			30.70		30.70		30.70
Fort Worth and Denver City Railway Company	469.03				469.03		469.03
Fort Worth and New Orleans Railway Company		40.70			40.70		40.70
Galveston, Houston and Henderson Railroad Company of 1882		50.00			50.00		50.00
Gulf, Colorado and Santa Fe Railway Company				992.64	992.64		992.64
Houston and Texas Central Railway Company		54.00		507.00	561.00	54.00	507.00
Houston, Central Arkansas and Northern Railroad Company			49.36		49.36		49.36
Houston East and West Texas Railway Company		192.00			192.00		192.00
International and Great Northern Railroad Company	775.40				775.40		775.40
Minden Railroad Company			5.25		5.25		5.25
Missouri, Kansas and Texas Railway Company (south of Denison, Tex.)	876.03				876.03		876.03
St. Louis, Arkansas and Texas Railway Company (in Texas)		640.30			640.30		640.30
San Antonio and Aransas Pass Railway Company	637.50				637.50		637.50
Southern Pacific Company (east of El Paso)				1,742.36	1,742.36		1,742.36
Texas Central Railway Company	230.00				230.00		230.00
Texas and Pacific Railway Company	1,499.00				1,499.00		1,499.00
Texas Trunk Railroad Company		51.00			51.00		51.00
Vicksburg, Shreveport and Pacific Railroad Company			170.69		170.69		170.69

D.—MILEAGE OPERATED OVER ALL LINES. (a)

Total express mileage in Group IX	4,562.96	1,028.00	256.00	3,242.00	9,088.96	54.00	9,034.96

a No mileage over water and stage lines in this group.

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Part 1.—BY COMPANIES IN EACH GROUP—Continued.

GROUP X.

A.—MILEAGE OPERATED OVER RAILWAYS.

ROUTES.	Denver and Rio Grande.	Northern Pacific.	Pacific.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over railways in Group X	413.50	1,102.00	2,039.34	7,468.98	11,023.82		11,023.82
Atlantic and Pacific Railroad Company (western division)				818.00	818.00		818.00
Arcata and Mad River Railroad Company				15.00	15.00		15.00
Carson and Colorado Railroad Company				300.00	300.00		300.00
Eel River and Eureka Railroad Company				25.00	25.00		25.00
Eureka and Palisade Railroad Company				84.00	84.00		84.00
Maricopa and Phœnix Railroad Company				34.36	34.36		34.36
Nevada-California-Oregon Railway Company				70.00	70.00		70.00
New Mexico and Arizona Railroad Company				87.78	87.78		87.78
Northern Pacific Coast Railroad Company				88.00	88.00		88.00
Northern Pacific Railroad Company (west of Idaho)		824.00			824.00		824.00
Olympia and Chehalis Valley Railway Company		15.00			15.00		15.00
Oregon and Washington Territory Railroad Company		161.00			161.00		161.00
Oregonian Railway Company				182.00	182.00		182.00
Oregon Pacific Railway Company				127.90	127.90		127.90
Oregon Railway and Navigation Company			640.42	330.54	970.96		970.96
Oregon Short Line and Utah Northern Railway Company			1,398.92		1,398.92		1,398.92
Pacific Coast Railway Company				76.10	76.10		76.10
Prescott and Arizona Central Railway Company				73.30	73.30		73.30
Rio Grande Western Railway Company	373.70				373.70		373.70
San Francisco and North Pacific Railway Company				162.25	162.25		162.25
Santa Fe Southern Railway Company	39.80				39.80		39.80
Seattle, Lake Shore and Eastern Railway Company				155.80	155.80		155.80
Southern California Railway Company				476.20	476.20		476.20
Southern Pacific Company (west of El Paso)				4,310.55	4,310.55		4,310.55
Spokane Falls and Northern Railroad Company		102.00			102.00		102.00
Virginia and Truckee Railroad Company				52.20	52.20		52.20

B.—MILEAGE OPERATED OVER WATER LINES.

ROUTES.	Denver and Rio Grande.	Northern Pacific.	Pacific.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over water lines in Group X		161.00	195.00	3,246.00	3,602.00		3,602.00
Colorado River Steamboat Company				365.00	365.00		365.00
Oregon Development Company				450.00	450.00		450.00
Oregon Railway and Navigation Company			195.00		195.00		195.00
Pacific Coast Steamship Company		161.00		1,576.00	1,737.00		1,737.00
Southern Pacific Company Steamship Line				125.00	125.00		125.00
Union Pacific Steamship Company				730.00	730.00		730.00

C.—MILEAGE OPERATED OVER STAGE LINES.

ROUTES.	Denver and Rio Grande.	Northern Pacific.	Pacific.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total mileage operated over stage lines in Group X		20.00		2,724.00	2,744.00		2,744.00
Lines in Arizona				133.00	133.00		133.00
Lines in California				2,003.00	2,003.00		2,003.00
Lines in Nevada				353.00	353.00		353.00
Lines in Oregon		20.00		235.00	255.00		255.00

D.—MILEAGE OPERATED OVER ALL LINES.

ROUTES.	Denver and Rio Grande.	Northern Pacific.	Pacific.	Wells, Fargo & Co.'s.	Total operated mileage.	Duplicated mileage.	Net mileage.
Total express mileage in Group X	413.50	1,283.00	2,234.34	13,438.98	17,369.82		17,369.82

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Parts 2 and 3.—BY COMPANY AND GROUP TOTALS.

A.—MILEAGE OPERATED OVER RAILWAYS.

GROUPS.	Adams.	American.	Camden and Atlantic.	Cincinnati, Georgetown and Portsmouth.	Denver and Rio Grande.	Dominion.	Earle & Prew's.	Long Island.	National.	New England Despatch.
Total mileage operated over railways.	23, 300. 50	40, 133. 00	78. 93	42. 00	2, 100. 50	252. 00	146. 00	352. 79	1, 385. 00	887. 00
Group I	1, 464. 00	[a]4, 997. 00				[b]252. 00	146. 00		430. 00	887. 00
II	6, 082. 00	4, 568. 00	78. 93					352. 79	955. 00	
III	5, 389. 00	[c]9, 272. 75		42. 00						
IV	1, 550. 50									
V	1, 507. 00									
VI	5, 103. 00	20, 540. 03								
VII		755. 22								
VIII	2, 205. 00				1, 687. 00					
IX										
X					413. 50					

B.—MILEAGE OPERATED OVER WATER LINES.

GROUPS.	Adams.	American.	Camden and Atlantic.	Cincinnati, Georgetown and Portsmouth.	Denver and Rio Grande.	Dominion.	Earle & Prew's.	Long Island.	National.	New England Despatch.
Total mileage operated over water lines.	1, 437. 00	2, 863. 00					218. 00		231. 00	1, 407. 00
Group I	292. 00	2, 275. 00					218. 00			1, 407. 00
II	399. 00	288. 00							231. 00	
III	746. 00	300. 00								
X										

C.—MILEAGE OPERATED OVER STAGE LINES.

GROUPS.	Adams.	American.	Camden and Atlantic.	Cincinnati, Georgetown and Portsmouth.	Denver and Rio Grande.	Dominion.	Earle & Prew's.	Long Island.	National.	New England Despatch.
Total mileage operated over stage lines.	181. 00	130. 00								
Group I		90. 00								
II		3. 00								
III	55. 00	6. 00								
V	122. 00									
VI	4. 00	31. 00								
X										

D.—MILEAGE OPERATED OVER ALL LINES.

GROUPS.	Adams.	American.	Camden and Atlantic.	Cincinnati, Georgetown and Portsmouth.	Denver and Rio Grande.	Dominion.	Earle & Prew's.	Long Island.	National.	New England Despatch.
Total express mileage operated over all lines.	24, 918. 50	43, 126. 00	78. 93	42. 00	2, 100. 50	252. 00	364. 00	352. 79	1, 616. 00	2, 294. 00
Group I	1, 756. 00	[a]7, 362. 00				[b]252. 00	364. 00		430. 00	2, 294. 00
II	6, 481. 00	4, 859. 00	78. 93					352. 79	1, 186. 00	
III	6, 190. 00	[c]9, 578. 75		42. 00						
IV	1, 550. 50									
V	1, 629. 00									
VI	5, 107. 00	20, 571. 03								
VII		755. 22								
VIII	2, 205. 00				1, 687. 00					
IX										
X					413. 50					

[a] Includes 89.28 miles of line in Canada.

[b] Includes 85.50 miles of line in Canada.

[c] Includes 300.30 miles of line in Canada.

TABLE 2.—MILEAGE OPERATED BY EXPRESS COMPANIES ON JUNE 30, 1890, BY ROUTES—Continued.

Parts 2 and 3.—BY COMPANY AND GROUP TOTALS—Continued.

A.—MILEAGE OPERATED OVER RAILWAYS.

GROUPS.	New York and Boston Despatch.	Northern Pacific.	Pacific.	Southern.	United States.	Wells, Fargo & Co.'s.	West Jersey.	Total.	Duplicated mileage.	Net mileage.
Total mileage operated over railways.	399.23	4,719.00	21,127.00	21,714.00	20,587.50	23,128.00	245.06	a160,597.51	5,924.31	a154,673.20
Group I	399.23				240.00			b8,815.23	1,953.90	b6,861.33
II					4,239.00	1,548.00	245.06	18,068.78	646.91	17,421.87
III			479.00		5,129.75	1,450.00		c21,762.50	1,258.05	c20,504.45
IV				6,435.00	540.00			8,525.50	51.57	8,473.93
V			687.98	12,898.00	1,431.50			16,524.48	1,060.84	15,463.64
VI		2,388.14	1,951.00	152.00	6,986.25	728.00		37,848.42	745.36	37,103.06
VII		1,228.86	2,305.49			4,495.71		8,785.28		8,785.28
VIII			9,101.23	1,201.00	1,765.00	4,195.31		20,154.54	153.68	20,000.86
IX			4,562.96	1,028.00	256.00	3,242.00		9,088.96	54.00	9,034.96
X		1,102.00	2,039.34			7,468.98		11,023.82		11,023.82

B.—MILEAGE OPERATED OVER WATER LINES.

GROUPS.	New York and Boston Despatch.	Northern Pacific.	Pacific.	Southern.	United States.	Wells, Fargo & Co.'s.	West Jersey.	Total.	Duplicated mileage.	Net mileage.
Total mileage operated over water lines.	233.00	161.00	195.00		891.00	3,246.00		10,882.00	1,708.00	9,174.00
Group I	233.00				601.00			5,026.00	1,626.00	3,400 00
II					290.00			1,208.00	82.00	1,126.00
III								1,046.00		1,046.00
X		161.00	195.00			3,246.00		3,602.00		3,602.00

C.—MILEAGE OPERATED OVER STAGE LINES.

GROUPS.	New York and Boston Despatch.	Northern Pacific.	Pacific.	Southern.	United States.	Wells, Fargo & Co.'s.	West Jersey.	Total.	Duplicated mileage.	Net mileage.
Total mileage operated over stage lines.		20.00				2,724.00		3,055.00		3,055.00
Group I								90.00		90.00
II								3.00		3.00
III								61.00		61.00
V								122.00		122.00
VI								35.00		35.00
X		20.00				2,724.00		2,744.00		2,744.00

D.—MILEAGE OPERATED OVER ALL LINES.

GROUPS.	New York and Boston Despatch.	Northern Pacific.	Pacific.	Southern.	United States.	Wells, Fargo & Co.'s.	West Jersey.	Total.	Duplicated mileage.	Net mileage.
Total express mileage operated over all lines.	632.23	4,900.00	21,322.00	21,714.00	21,478.50	29,098.00	245.06	a174,534.51	7,632.31	a166,902.20
Group I	632.23				841.00			b13,931.23	3,579.90	b10,351.33
II					4,529.00	1,548.00	245.06	19,279.78	728.91	18,550.87
III			479.00		5,129.75	1,450.00		c22,869.50	1,258.05	c21,611.45
IV				6,435.00	540.00			8,525.50	51.57	8,473.93
V			687.98	12,898.00	1,431.50			16,646.48	1,060.84	15,585.64
VI		2,388.14	1,951.00	152.00	6,986.25	728.00		37,883.42	745.36	37,138.06
VII		1,228.86	2,305.49			4,495.71		8,785.28		8,785.28
VIII			9,101.23	1,201.00	1,765.00	4,195.31		20,154.54	153.68	20,000.86
IX			4,562.96	1,028.00	256.00	3,242.00		9,088.96	54.00	9,034.96
X		1,283.00	2,234.34			13,438.98		17,369.82		17,369.82

a Includes 475.18 miles of line in Canada.

b Includes 174.88 miles of line in Canada.

c Includes 300.30 miles of line in Canada.

TABLE 3.—EQUIPMENT AND FIXTURES OF

PART 1.—BY COMPANIES IN EACH GROUP.

	COMPANIES.	CARS.		OFFICE SAFES.		MESSENGERS' SAFES.	
		Number.	Value.	Number.	Value.	Number.	Value.
1	Total for United States	35	$86,416.39	7,670	$582,525.03	6,910	$125,816.70
2	Group I			312	23,223.68	666	9,809.10
3	Adams Express Company			64	5,537.25	163	2,465.45
4	American Express Company			167	10,280.93	399	5,717.90
5	Dominion Express Company			3	496.00	8	240.00
6	Earle & Prew's Express			13	2,415.00	16	165.00
7	National Express Company			22	1,164.50	9	167.00
8	New England Despatch Express Company			12	600.00	8	80.00
9	New York and Boston Despatch Express Company			15	1,460.00	41	708.75
10	United States Express Company			16	1,270.00	22	265.00
11	Group II	8	22,566.55	915	56,683.12	1,402	22,141.20
12	Adams Express Company			257	16,122.00	558	7,877.00
13	American Express Company			317	19,579.46	372	5,330.80
14	Camden and Atlantic Express Company					4	100.00
15	Long Island Express Company			6	420.00	15	150.00
16	National Express Company			39	2,945.50	56	1,130.00
17	United States Express Company			209	11,631.00	325	6,308.00
18	Wells, Fargo & Co.'s Express	8	22,566.55	83	4,785.16	65	1,070.40
19	West Jersey Express Company			4	1,200.00	7	175.00
20	Group III	9	25,387.36	935	62,105.86	998	15,783.11
21	Adams Express Company			201	14,039.04	220	3,185.70
22	American Express Company			374	18,060.74	442	6,261.66
23	Cincinnati, Georgetown and Portsmouth Express Company					1	15.00
24	Pacific Express Company			40	4,872.78	11	306.55
25	United States Express Company			227	19,750.00	251	4,810.00
26	Wells, Fargo & Co.'s Express	9	25,387.36	93	5,383.30	73	1,204.20
27	Group IV			267	10,491.00	282	4,218.00
28	Adams Express Company			85	2,980.00	53	595.00
29	Southern Express Company			138	5,796.00	194	2,813.00
30	United States Express Company			44	1,715.00	35	810.00
31	Group V			792	42,487.85	550	8,944.02
32	Adams Express Company			101	5,622.50	82	1,116.00
33	Pacific Express Company			66	7,582.41	19	477.02
34	Southern Express Company			565	26,307.94	386	5,866.00
35	United States Express Company			60	2,975.00	63	1,485.00
36	Group VI	8	18,462.48	1,888	126,957.01	1,311	19,997.23
37	Adams Express Company			233	11,399.37	253	2,411.90
38	American Express Company			918	44,368.36	744	10,521.14
39	Pacific Express Company	5	10,000.00	384	45,153.33	116	2,830.79
40	Southern Express Company			5	222.50	4	72.00
41	United States Express Company			317	24,019.00	169	3,760.00
42	Wells, Fargo & Co.'s Express	3	8,462.48	31	1,794.45	25	401.40
43	Group VII			295	28,917.19	161	4,106.03
44	American Express Company			4	534.20	10	142.50
45	Pacific Express Company			182	20,033.63	51	1,289.47
46	Wells, Fargo & Co.'s Express			109	8,349.36	100	2,674.06
47	Group VIII	10	20,000.00	1,264	131,470.59	679	22,211.89
48	Adams Express Company			98	6,059.26	85	966.40
49	Denver and Rio Grande Express			38	7,600.00	145	10,625.00
50	Pacific Express Company	10	20,000.00	840	96,590.00	243	6,076.67
51	Southern Express Company			73	3,890.41	48	725.50
52	United States Express Company			111	9,421.00	63	1,285.00
53	Wells, Fargo & Co.'s Express			104	7,909.92	95	2,533.32
54	Group IX			523	53,758.66	231	5,390.51
55	Pacific Express Company			391	44,902.44	113	2,824.89
56	Southern Express Company			47	2,643.50	43	616.00
57	United States Express Company			10	500.00	6	120.00
58	Wells, Fargo & Co.'s Express			75	5,712.72	69	1,829.62
59	Group X			251	32,978.07	449	9,957.61
60	Pacific Express Company			76	8,565.07	19	519.61
61	Wells, Fargo & Co.'s Express			175	24,413.00	430	9,438.00
62	Not divided by groups (Northern Pacific Express Company)			228	13,452.00	181	3,258.00

EXPRESS COMPANIES ON JUNE 30, 1890.

PART 1.—BY COMPANIES IN EACH GROUP.

MESSENGERS' TRUNKS.		HORSES.		WAGONS.		SLEIGHS.		Value of office fixtures.	Value of stable equipment, including harness.	Total value of equipment and fixtures.	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.				
5,690	$62,624.15	8,291	$1,464,476.30	6,008	$1,192,286.44	1,439	$65,595.91	$1,146,469.72	$347,834.48	$5,074,045.12	1
1,201	11,904.06	1,093	208,326.00	855	155,849.50	436	27,675.69	152,847.88	45,859.22	635,495.13	2
350	3,589.00	255	44,625.00	243	35,487.50	147	10,602.50	54,642.14	14,986.87	171,935.71	3
623	4,882.91	447	91,781.00	315	65,822.50	161	8,158.19	54,853.90	16,273.00	257,770.33	4
8	160.00	....	....	....	....	....	....	....	....	896.00	5
37	512.00	85	14,875.00	54	10,315.00	37	3,875.00	4,760.00	4,335.25	41,252.25	6
5	28.50	28	5,705.00	29	4,712.50	18	684.00	10,067.13	1,144.25	23,672.88	7
25	100.00	40	7,000.00	42	7,500.00	17	1,000.00	3,000.00	2,500.00	21,780.00	8
51	1,611.65	139	28,100.00	98	19,850.00	34	2,393.00	22,834.71	4,294.50	81,252.61	9
102	1,020.00	99	16,240.00	74	12,162.00	22	963.00	2,690.00	2,325.35	36,935.35	10
1,417	14,477.39	3,068	612,307.50	2,143	416,013.50	598	27,163.97	292,029.81	125,599.47	1,588,982.51	11
537	7,895.00	1,044	222,280.00	759	137,297.80	90	2,527.00	123,980.75	45,845.90	563,825.45	12
581	4,553.59	731	150,095.00	513	107,202.50	308	15,536.81	104,466.18	30,991.00	437,755.34	13
4	16.00	6	800.00	4	800.00	....	....	50.00	250.00	2,016.00	14
6	36.00	87	17,400.00	60	15,000.00	2	50.00	900.00	2,856.00	36,812.00	15
42	395.00	70	11,335.00	65	9,150.00	48	2,308.16	14,780.53	2,427.30	44,471.49	16
78	593.00	945	176,857.50	613	119,532.00	128	5,936.00	21,045.75	34,986.07	376,889.32	17
154	928.80	165	30,940.00	116	24,781.20	22	806.00	26,681.60	7,893.20	120,452.91	18
15	60.00	20	2,600.00	13	2,250.00	....	....	125.00	350.00	6,760.00	19
660	7,991.60	955	152,726.53	753	136,014.55	121	3,193.57	140,526.68	32,564.32	576,293.58	20
214	4,346.70	239	36,800.00	193	39,106.20	....	....	44,715.27	7,892.95	150,085.86	21
206	1,390.00	286	46,669.00	214	41,420.00	69	1,639.82	49,421.17	9,904.80	174,767.19	22
....	....	....	....	....	....	....	....	....	....	15.00	23
....	....	17	2,255.03	8	2,193.50	....	....	1,344.94	1,249.68	12,222.48	24
67	1,210.00	228	32,195.00	207	25,416.00	28	647.00	15,028.50	4,637.10	103,693.60	25
173	1,044.90	185	34,807.50	131	27,878.85	24	906.75	30,016.80	8,879.79	135,509.45	26
186	2,102.00	189	22,760.00	143	17,394.00	....	....	17,854.50	3,331.85	78,151.35	27
19	220.00	71	8,120.00	48	6,390.00	....	....	9,690.00	1,110.00	29,105.00	28
150	1,710.00	98	12,250.00	72	8,064.00	....	....	6,420.00	1,850.00	38,903.00	29
17	172.00	20	2,390.00	23	2,940.00	....	....	1,744.50	371.85	10,143.35	30
492	6,977.50	396	61,175.79	270	48,757.30	....	....	31,390.93	10,534.59	210,267.98	31
99	1,346.00	85	12,825.00	39	9,355.00	....	....	6,489.00	2,119.80	38,873.30	32
....	....	18	3,508.99	8	3,413.25	....	....	2,092.85	1,944.59	19,019.09	33
342	4,616.50	250	39,776.80	184	32,084.05	....	....	19,959.10	5,681.40	134,291.79	34
51	1,015.00	43	5,065.00	39	3,905.00	....	....	2,850.00	788.80	18,083.80	35
680	7,244.20	1,335	206,996.84	952	186,533.50	237	5,780.68	207,957.47	51,764.62	831,694.03	36
191	3,288.90	171	28,311.00	139	29,769.30	....	....	35,309.66	5,846.48	116,336.61	37
347	2,336.00	635	103,619.00	477	92,325.00	169	4,028.43	121,409.02	24,332.33	402,939.28	38
....	....	173	19,789.34	68	19,522.25	....	....	12,838.54	11,425.01	121,559.26	39
4	56.00	2	250.00	2	268.00	....	....	88.10	61.00	1,017.60	40
81	1,215.00	292	43,425.00	222	35,356.00	60	1,450.00	28,306.55	7,139.85	144,671.40	41
57	348.30	62	11,602.50	44	9,292.95	8	302.25	10,005.60	2,959.95	45,169.88	42
23	225.56	151	24,648.26	104	29,772.22	5	290.00	42,272.89	8,672.79	138,904.94	43
7	50.00	4	790.00	3	755.00	3	180.00	664.30	271.59	3,387.59	44
....	....	72	9,898.96	45	12,217.42	....	....	16,211.27	4,702.46	64,353.21	45
16	175.56	75	13,959.30	56	16,799.80	2	110.00	25,397.32	3,698.74	71,164.14	46
125	1,834.72	578	85,391.17	354	85,348.60	5	140.00	78,891.37	35,517.15	460,805.49	47
34	426.40	83	15,259.00	74	15,907.50	....	....	16,357.40	3,777.62	58,753.58	48
26	520.00	51	10,200.00	35	7,875.00	3	30.00	6,000.00	3,000.00	45,850.00	49
....	....	358	44,700.07	175	43,480.50	....	....	26,659.56	24,771.67	262,278.47	50
46	662.00	9	1,547.50	11	1,787.00	....	....	2,259.77	371.50	11,243.68	51
4	60.00	5	460.00	6	383.00	....	....	3,554.00	92.40	15,255.40	52
15	166.32	72	13,224.60	53	15,915.60	2	110.00	24,060.64	3,503.96	67,424.36	53
59	731.12	237	33,118.55	138	40,827.52	....	....	35,229.83	14,728.61	183,784.80	54
....	....	166	20,779.95	75	25,675.42	....	....	12,393.55	11,515.73	118,091.98	55
42	491.00	17	2,637.50	24	3,607.50	....	....	5,409.32	657.00	16,061.82	56
6	120.00	2	150.00	1	50.00	....	....	50.00	25.00	1,015.00	57
11	120.12	52	9,551.10	38	11,494.60	....	....	17,376.96	2,530.88	48,616.00	58
750	7,875.00	194	38,215.66	232	58,623.75	1	20.00	95,677.60	12,261.86	255,609.55	59
....	....	28	4,442.66	11	4,157.75	....	....	2,228.40	2,787.06	22,700.55	60
750	7,875.00	166	33,773.00	221	54,466.00	1	20.00	93,449.20	9,474.80	232,909.00	61
97	1,261.00	95	18,810.00	64	17,152.00	36	1,332.00	51,790.76	7,000.00	114,055.76	62

TABLE 3.—EQUIPMENT AND FIXTURES OF

PART 2.—BY COMPANY TOTALS.

	COMPANIES AND GROUPS.	CARS.		OFFICE SAFES.		MESSENGERS' SAFES.	
		Number.	Value.	Number.	Value.	Number.	Value.
1	Total	35	$86,416.39	7,670	$582,525.03	6,910	$125,816.70
2	Adams Express Company			1,039	61,759.42	1,414	18,617.45
3	American Express Company			1,780	92,823.69	1,967	27,974.00
4	Camden and Atlantic Express Company					4	100.00
5	Cincinnati, Georgetown and Portsmouth Express Company					1	15.00
6	Denver and Rio Grande Express			38	7,600.00	145	10,625.00
7	Dominion Express Company			3	496.00	8	240.00
8	Earle & Prew's Express			13	2,415.00	16	165.00
9	Long Island Express Company			6	420.00	15	150.00
10	National Express Company			61	4,110.00	65	1,297.00
11	New England Despatch Express Company			12	600.00	8	80.00
12	New York and Boston Despatch Express Company			15	1,460.00	41	708.75
13	Northern Pacific Express Company			228	13,452.00	181	3,258.00
14	Pacific Express Company	15	30,000.00	1,979	227,699.66	572	14,325.00
15	Southern Express Company			828	38,860.35	675	10,092.50
16	United States Express Company			994	71,281.00	934	18,843.00
17	Wells, Fargo & Co.'s Express	20	56,416.39	670	58,347.91	857	19,151.00
18	West Jersey Express Company			4	1,200.00	7	175.00

PART 3.—BY GROUP TOTALS.

	COMPANIES AND GROUPS.	CARS.		OFFICE SAFES.		MESSENGERS' SAFES.	
		Number.	Value.	Number.	Value.	Number.	Value.
1	Total	35	86,416.39	7,670	582,525.03	6,910	125,816.70
2	Group I			312	23,223.68	666	9,809.10
3	II	8	22,566.55	915	56,683.12	1,402	22,141.20
4	III	9	25,387.36	935	62,105.86	998	15,783.11
5	IV			267	10,491.00	282	4,218.00
6	V			792	42,487.85	550	8,944.02
7	VI	8	18,462.48	1,888	126,957.01	1,311	19,997.23
8	VII			295	28,917.19	161	4,106.03
9	VIII	10	20,000.00	1,264	131,470.59	679	22,211.89
10	IX			523	53,758.66	231	5,390.51
11	X			251	32,978.07	449	9,957.61
12	Not divided by groups (Northern Pacific Express Company)			228	13,452.00	181	3,258.00

EXPRESS COMPANIES ON JUNE 30, 1890—Continued.

PART 2.—BY COMPANY TOTALS.

MESSENGERS' TRUNKS.		HORSES.		WAGONS.		SLEIGHS.		Value of office fixtures.	Value of stable equipment, including harness.	Total value of equipment and fixtures.	
Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.				
5, 690	$62, 624. 15	8, 291	$1, 464, 476. 30	6, 008	$1, 192. 286. 44	1, 439	$65, 595. 91	$1, 146, 469. 72	$347, 834. 48	$5, 074, 045. 12	1
1, 444	21, 112. 00	1, 948	368, 220. 00	1, 495	273, 313. 30	237	13, 129. 50	291, 184. 22	81, 579, 62	1, 128, 915. 51	2
1, 764	13, 212. 50	2, 103	392, 954. 00	1, 522	307, 525. 00	710	29, 543. 25	330, 814. 57	81, 772. 72	1, 276, 619. 73	3
4	16. 00	6	800. 00	4	800. 00	....	....	50. 00	250. 00	2, 016. 00	4
....	....	....	....	....	....	....	....	....	....	15. 00	5
26	520. 00	51	10, 200. 00	35	7, 875. 00	3	30. 00	6, 000. 00	3, 000. 00	45, 850. 00	6
8	160. 00	....	....	....	....	....	....	....	....	896. 00	7
37	512. 00	85	14, 875. 00	54	10, 315. 00	37	3, 875. 00	4, 760. 00	4, 335. 25	41, 252. 25	8
6	36. 00	87	17, 400. 00	60	15, 000. 00	2	50. 00	900. 00	2, 856. 00	36, 812. 00	9
47	423. 50	98	17, 040. 00	94	13, 862. 50	66.	2, 992. 16	24, 847. 66	3, 571. 55	68, 144. 37	10
25	100. 00	40	7, 000. 00	42	7, 500. 00	17	1, 000 00	3, 000. 00	2. 500. 00	21, 780. 00	11
51	1, 611. 65	139	28. 100. 00	93	19, 850. 00	34	2, 393. 00	22, 834. 71	4, 294. 50	81, 252. 61	12
97	1, 261. 00	95	18, 810. 00	64	17, 152. 00	36	1, 332. 00	51, 790. 76	7, 000. 00	114, 055. 76	13
....	....	832	105, 375. 00	390	110, 660. 09	....	....	73, 769. 09	58, 396. 20	620, 225. 04	14
584	7, 535. 50	376	56, 461. 80	293	45, 810. 55	....	....	34, 136. 29	8, 620. 90	201, 517. 89	15
406	5, 405. 00	1, 634	276, 782. 50	1, 185	199, 744. 00	238	8, 996. 00	75, 269. 30	50, 366. 42	706, 687. 22	16
1, 176	10, 659. 00	777	147, 858. 00	659	160, 629. 00	59	2, 255. 00	226, 988. 12	38, 941. 32	721, 245. 74	17
15	60. 00	20	2, 600. 00	13	2, 250. 00	....	....	125. 00	350. 00	6, 760. 00	18

PART 3.—BY GROUP TOTALS.

MESSENGERS' TRUNKS.		HORSES.		WAGONS.		SLEIGHS.		Value of office fixtures.	Value of stable equipment, including harness.	Total value of equipment and fixtures.	
5, 690	62, 624. 15	8, 291	1, 464, 476. 30	6, 008	1, 192, 286. 44	1, 439	65, 595. 91	1, 146, 469. 72	347, 834. 48	5, 074, 045. 12	1
1, 201	11, 904. 06	1, 093	208, 326. 00	855	155, 849. 50	436	27. 675. 69	152, 847. 88	45, 859. 22	635, 495. 13	2
1, 417	14. 477. 39	3, 068	612, 307. 50	2, 143	416, 013. 50	598	27, 163. 97	292, 029. 81	125, 599. 47	1, 588, 982. 51	3
660	7, 991. 60	955	152, 726. 53	753	136, 014. 55	121	3, 193. 57	140, 526. 68	32, 564. 32	576, 293. 58	4
186	2, 102. 00	189	22, 760. 00	143	17, 394. 00	....	....	17, 854. 50	3, 331. 85	78, 151. 35	5
492	6, 977. 50	396	61, 175. 79	270	48, 757. 30	....	....	31, 390. 93	10, 534. 59	210, 267. 98	6
680	7, 244. 20	1, 335	206, 996. 84	952	186, 533. 50	237	5, 780. 68	207, 957. 47	51, 764. 62	831, 694. 03	7
23	225. 56	151	24, 648. 26	104	29, 772. 22	5	290. 00	42, 272. 89	8, 672. 79	138, 904. 94	8
125	1. 834. 72	578	85, 391. 17	354	85, 348. 60	5	140. 00	78, 891. 37	35, 517. 15	460, 805. 49	9
59	731. 12	237	33, 118. 55	138	40, 827. 52	....	....	35, 229. 83	14, 728. 61	183, 784. 80	10
750	7, 875. 00	194	38, 215. 66	232	58, 623. 75	1	20. 00	95, 677. 60	12, 261. 86	255, 609. 55	11
97	1, 261. 00	95	18, 810. 00	64	17, 152. 00	36	1, 332. 00	51, 790. 76	7, 000. 00	114, 055. 76	12

TABLE 4.—EMPLOYÉS OF EXPRESS COMPANIES ON JUNE 30, 1890.

PART 1.—BY COMPANIES IN EACH GROUP.

COMPANIES.	Total.	General officers.	Superintendents and route agents.	General office clerks.	Agents.	Assistants to agents.	Messengers.	Baggage men employed as messengers.	Drivers of wagons.	All others.
Total employés in United States	45,718	86	320	1,377	21,065	7,952	4,130	1,405	4,877	4,506
Group I	3,974	10	26	91	1,407	644	487	130	689	490
Adams Express Company	957	....	4	23	320	153	99	21	152	185
American Express Company	1,881	3	11	16	777	372	297	43	246	116
Dominion Express Company	50	....	4	....	18	....	14	2	....	12
Earle & Prew's Express	190	2	....	30	26	....	15	11	57	49
National Express Company	134	....	1	....	46	33	11	3	25	15
New England Despatch Express Company	174	2	2	3	52	....	20	10	75	10
New York and Boston Despatch Express Company	351	3	2	16	106	47	18	22	79	58
United States Express Company	237	....	2	3	62	39	13	18	55	45
Group II	11,542	49	52	611	3,803	1,918	830	601	1,711	1,967
Adams Express Company	4,044	9	12	123	1,356	516	273	225	598	932
American Express Company	3,003	25	17	252	931	719	283	34	401	341
Camden and Atlantic Express Company	33	1	....	1	19	....	....	6	6	....
Long Island Express Company	82	....	1	....	....	....	15	....	66	....
National Express Company	453	7	5	26	169	62	59	10	59	56
United States Express Company	2,922	4	12	183	969	367	169	233	412	573
Wells, Fargo & Co.'s Express	907	2	5	25	292	254	31	78	155	65
West Jersey Express Company	98	1	....	1	67	....	....	15	14	....
Group III	6,071	1	39	107	3,320	730	576	193	571	534
Adams Express Company	1,701	....	10	73	1,011	175	137	64	151	80
American Express Company	2,225	1	17	16	1,203	209	297	39	197	246
Cincinnati, Georgetown and Portsmouth Express Company	4	....	....	....	....	....	1	....	....	3
Pacific Express Company	114	....	1	....	47	51	5	1	9	....
United States Express Company	1,362	....	6	14	729	128	104	37	164	180
Wells, Fargo & Co.'s Express	665	....	5	4	330	167	32	52	50	25
Group IV	1,685	....	15	24	1,197	94	127	64	80	84
Adams Express Company	365	....	1	....	269	25	24	6	24	16
Southern Express Company	1,061	....	12	24	735	55	96	44	40	55
United States Express Company	259	....	2	....	193	14	7	14	16	13
Group V	3,241	....	33	76	1,968	346	290	115	198	215
Adams Express Company	447	....	3	5	275	44	40	9	45	26
Pacific Express Company	180	....	2	....	74	79	8	2	15	....
Southern Express Company	2,355	....	24	70	1,473	201	210	103	107	167
United States Express Company	259	....	4	1	146	22	32	1	31	22
Group VI	8,891	7	59	88	4,618	1,385	891	145	836	862
Adams Express Company	1,017	....	5	10	582	90	111	52	92	75
American Express Company	4,836	7	32	60	2,575	571	547	68	439	537
Pacific Express Company	1,052	....	6	....	435	471	44	10	86	....
Southern Express Company	38	....	....	1	22	6	4	1	2	2
United States Express Company	1,671	....	14	15	898	168	163	9	177	227
Wells, Fargo & Co.'s Express	277	....	2	2	106	79	22	5	40	21
Group VII	1,395	5	17	127	594	389	102	24	113	24
American Express Company	28	....	1	....	13	3	7	....	3	1
Pacific Express Company	628	4	9	110	201	213	21	5	65	....
Wells, Fargo & Co.'s Express	739	1	7	17	380	173	74	19	45	23
Group VIII	4,347	1	38	47	2,075	1,297	354	71	344	120
Adams Express Company	531	....	3	5	279	58	55	9	63	59
Denver and Rio Grande Express	264	1	5	12	137	30	39	11	29	....
Pacific Express Company	2,277	....	16	15	937	1,007	95	23	184	....
Southern Express Company	184	....	4	10	124	6	16	12	6	6
United States Express Company	347	....	3	....	247	4	56	1	8	28
Wells, Fargo & Co.'s Express	744	....	7	5	351	192	93	15	54	27
Group IX	1,705	....	15	7	782	592	112	35	137	25
Pacific Express Company	1,051	....	6	....	436	468	44	11	86	....
Southern Express Company	116	....	3	4	73	8	7	10	8	3
United States Express Company	22	....	....	....	18	1	2	....	1	....
Wells, Fargo & Co.'s Express	516	....	6	3	255	115	59	14	42	22
Group X	2,034	7	14	166	889	557	230	27	108	36
Pacific Express Company	192	....	3	....	79	85	8	2	15	....
Wells, Fargo & Co.'s Express	1,842	7	11	166	810	472	222	25	93	36
Not divided by groups (Northern Pacific Express Company)	833	6	12	33	412	....	131	....	90	149

TABLE 4.—EMPLOYÉS OF EXPRESS COMPANIES ON JUNE 30, 1890—Continued.

PART 2.—BY COMPANY TOTALS.

COMPANIES AND GROUPS.	Total.	General officers.	Superintendents and route agents.	General office clerks.	Agents.	Assistants to agents.	Messengers.	Baggage men employed as messengers.	Drivers of wagons.	All others.
Total employés in United States	45,718	86	320	1,377	21,065	7,952	4,130	1,405	4,877	4,506
Adams Express Company	9,062	9	38	239	4,092	1,061	739	386	1,125	1,373
American Express Company	11,973	36	78	344	5,499	1,874	1,431	184	1,286	1,241
Camden and Atlantic Express Company	33	1	....	1	19	....	....	6	6	....
Cincinnati, Georgetown and Portsmouth Express Company	4	....	....	....	....	....	1	....	....	3
Denver and Rio Grande Express	264	1	5	12	137	30	39	11	29	....
Dominion Express Company	50	....	4	....	18	....	14	2	....	12
Earle & Prew's Express	190	2	....	30	26	....	15	11	57	49
Long Island Express Company	82	....	1	....	....	....	15	....	66	....
National Express Company	587	7	6	26	215	95	70	13	84	71
New England Despatch Express Company	174	2	2	3	52	....	20	10	75	10
New York and Boston Despatch Express Company	351	3	2	16	106	47	18	22	79	58
Northern Pacific Express Company	833	6	12	33	412	....	131	....	90	149
Pacific Express Company	5,494	4	43	125	2,209	2,374	225	54	460	....
Southern Express Company	3,754	....	43	109	2,427	276	333	170	163	233
United States Express Company	7,079	4	43	216	3,262	743	546	313	864	1,088
Wells, Fargo & Co.'s Express	5,690	10	43	222	2,524	1,452	533	208	479	219
West Jersey Express Company	98	1	....	1	67	....	....	15	14	....

PART 3.—BY GROUP TOTALS.

COMPANIES AND GROUPS.	Total.	General officers.	Superintendents and route agents.	General office clerks.	Agents.	Assistants to agents.	Messengers.	Baggage men employed as messengers.	Drivers of wagons.	All others.
Total employés in United States	45,718	86	320	1,377	21,065	7,952	4,130	1,405	4,877	4,506
Group I	3,974	10	26	91	1,407	644	487	130	689	490
II	11,542	49	52	611	3,803	1,918	830	601	1,711	1,967
III	6,071	1	39	107	3,320	730	576	193	571	534
IV	1,685	....	15	24	1,197	94	127	64	80	84
V	3,241	....	33	76	1,968	346	290	115	198	215
VI	8,891	7	59	88	4,618	1,385	891	145	836	862
VII	1,395	5	17	127	594	389	102	24	113	24
VIII	4,347	1	38	47	2,075	1,297	354	71	344	120
IX	1,705	....	15	7	782	592	112	35	137	25
X	2,034	7	14	166	889	557	230	27	108	36
Not divided by groups (Northern Pacific Express Company)	833	6	12	33	412	....	131	....	90	149

TABLE 5.—EXPENDITURES OF EXPRESS COMPANIES FOR THE YEAR ENDING JUNE 30, 1890.

PART 1.—BY COMPANIES IN EACH GROUP.

COMPANIES.	Total. (a)	OPERATING EXPENSES.								Taxes.
		Paid to railways.	Paid to water lines.	Paid to stage lines.	Paid for salaries and wages.	Paid for local expenses and repairs.	Paid for general expenses.	Paid for other expenses of operation.	Total operating expenses.	
Total expenditures for United States.	$45,783,123.32	$19,327,280.49	$173,222.13	$60,679.38	$16,176,097.55	$3,560,045.83	$826,715.50	$2,289,663.82	$42,413,704.70	$171,370.31
Group I	4,328,704.79	1,681,423.73	105,439.27	1,620.61	1,758,528.52	571,751.50	71,114.98	114,331.31	4,304,209.92	24,494.87
Adams Express Company	1,387,520.51	581,196.30	54,213.10	....	509,308.48	189,304.43	12,580.82	31,074.14	1,377,677.27	9,843.24
American Express Company	1,886,334.23	761,866.94	10,214.30	1,620.61	806,866.26	227,917.95	45,594.74	22,650.49	1,876,731.29	9,602.94
Dominion Express Company	10,986.12	5,940.00	....	....	3,648.00	35.44	887.50	472.00	10,982.94	3.18
Earle & Prew's Express	204.242.69	48,579.50	21,800.00	....	84,740.83	36,689.80	2,236.40	9,875.66	203,922.19	320.50
National Express Company	77,803.75	27,180.35	278.69	....	37,024.62	7,794.69	2,390.43	2,036.72	76,705.50	1,098.25
New England Despatch Express Company.	120,503.02	22,497.16	13,972.63	....	52,271.00	22,460.71	1,410.92	6,709.00	119,321.42	1,181.60
New York and Boston Despatch Express Company.	406,148.75	123,374.42	4,244.68	....	176,037.22	84,115.47	3,452.72	12,985.23	404,209.74	1,939.01
United States Express Company.	235,165.72	110,789.06	715.87	....	88,632.11	3,433.01	2,561.45	28,528.07	234,659.57	506.15
Group II	11,156,744.96	4,396,300.16	20,005.06	779.60	4,606,737.98	1,289,235.83	198,675.90	590,972.73	11,102,707.26	54,037.70
Adams Express Company	4,670,361.89	1,786,652.34	9,023.16	....	1,974,215.61	704,463.20	65,398.30	122,131.28	4,661,883.89	8,478.00
American Express Company	3,128,288.55	1,076,816.26	2,930.69	306.05	1,371,464.68	486,768.64	90,583.05	62,241.04	3,091,110.41	37,178.14
Camden and Atlantic Express Company. (b)	16,696.09	3.46	552.68	....	11,399.34	....	54.32	4,686.29	16,696.09	....
Long Island Express Company. (c)	....	....	....	....	....	....	....	....	....	....
National Express Company	508,221.54	221,322.76	971.48	473.55	199,940.09	53,173.90	13,666.99	16,718.45	506,267 22	1,954.32
United States Express Company.	2,144,058.60	1,010,035.82	6,527.05	....	808,116.37	31,301.01	23,354.47	260,108.91	2,139,443.63	4,614.97
Wells, Fargo & Co.'s Express	642,449.72	299,849.98	....	....	208,547.24	13,529.08	5,551.41	113,159.74	640,637.45	1,812.27
West Jersey Express Company. (b)	46,668.57	1,619.54	....	....	33,054.65	....	67.36	11,927.02	46,668.57	....
Group III	6,102,306.70	3,142,369.09	14,409.44	1,307.52	2,122,954.34	365,451.38	80,915.17	356,976.02	6,084,382.96	17,923.74
Adams Express Company	1,673,747.84	859,195.52	6,596.86	878.80	618,324.47	149,413.17	19,110.43	15,439.96	1,668,959.21	4,788.63
American Express Company	2,018,745.75	1,149,669.39	2,949.51	428.72	634,365.70	169,572.60	36,172.00	17,969.47	2,011,127.39	7,618.36
Cincinnati, Georgetown and Portsmouth Express Company. (b)	1,080.00	....	....	....	1,080.00	....	....	....	1,080.00	....
Pacific Express Company	79,641.29	42,249.92	....	....	27,896.94	7,629.51	1,864.92	....	79,641.29	(d)
United States Express Company.	1,597,743.18	752,713.96	4,863.07	....	602,177.03	23,324.30	17,402.84	193,823.09	1,594,304,29	3,438.89
Wells, Fargo & Co.'s Express	731,348.64	338,540.30	....	....	239,110.20	15,511.80	6,364.98	129,743.50	729,270.78	2,077.86
Group IV	1,398,226.83	721,066.08	875.11	....	489,412.43	73,447.91	77,772.87	29,044.24	1,391,618.64	6,608.19
Adams Express Company	406,454.11	251,394.58	....	....	115,938.80	28,594.49	6,727.80	2,120.96	404,776.63	1,677.48
Southern Express Company	767,355.76	361,690.20	245.64	....	289,147.44	42,212.34	68,931.35	681.35	762,908.32	4,447.44
United States Express Company.	224,416.96	107,981.30	629.47	....	84,326.19	2,641.08	2,113.72	26,241.93	223,933.69	483.27
Group V	2,787,908.88	1,391,023.99	718.50	4,340.53	1,096,684.67	176,568.91	53,664.62	47,069.74	2,770,070.96	17,837.92
Adams Express Company	452,248.00	272,934.44	....	4,340.53	125,894.48	35,135.39	4,523.90	6,914.03	449,742.77	2,505.23
Pacific Express Company	123,815.80	65,633.03	....	....	43,409.73	11.871.08	2,901.96	(d)	123,815.80	(d)
Southern Express Company	1,959,441.75	933,521.20	....	....	832,235.28	125,877.00	43,488.96	9,529.99	1,944,652.43	14,789.32
United States Express Company.	252,403.33	118,935.32	718.50	....	95,145.18	3,685.44	2,749.80	30,625.72	251,859.96	543.37
Group VI	8,149,814.73	3,947,871.78	7,053.22	1,997.38	3,052,745.49	611,189.24	150,888.04	350,957.89	8,122,703.04	27,111.69
Adams Express Company	1,040,486.24	552,046.79	....	283.05	348,503.31	106,638.07	19,235.73	10,575.57	1,037,282.52	3,203.72
American Express Company	3,985,608.25	1,877,301.80	652.50	1,714.33	1,561,379.13	392,820.32	88,872.41	44,149.90	3,966,890.39	18,717.86
Pacific Express Company	750,728.46	398,407.98	....	....	261,104.01	74,120.61	17,095.86	(d)	750,728.46	(d)
Southern Express Company	37,471.59	20,714.09	....	....	13,775.16	2,016.60	771.24	186.24	37,463.33	8.26
United States Express Company.	2,102,658.57	990,584.60	6,400.72	....	792,475.40	30,695.18	22,902.44	255,074.55	2,098,132.89	4,525.68
Wells, Fargo & Co.'s Express	232,861.62	108,816.52	....	....	75,508.48	4,898.46	2,010.36	40,971.63	232,205.45	656.17
Group VII	1,295,550.82	644,832.15	....	....	432,291.28	52,840.72	15,822.55	147,390.05	1,293,176.75	2,374.07
American Express Company	33,717.90	13,191.94	....	....	14,117.34	5,204.74	1,101.59	87.29	33,702.90	15.00
Pacific Express Company	428,958.94	244,736.56	....	....	146,702.97	30,024.85	7,494.56	(d)	428,958.94	(d)
Wells, Fargo & Co.'s Express	832,873.98	386,903.65	....	....	271,470.97	17,611.13	7,226.40	147,302.76	830,514.91	2,359.07
Group VIII	3,422,191.11	1,638,630.72	993.79	....	1,252,773.53	275,757.37	67,358.68	182,845.90	3,418,359.99	3,831.12
Adams Express Company	451,773.86	200,843.43	....	....	176,926.06	59,884.23	4,875.40	8,712.34	451,241.46	532.40
Denver and Rio Grande Express.	152,188.13	(e)	....	....	106,071.34	35,849.07	9,638.35	629.37	152,188.13	(f)
Pacific Express Company	1,566,925.18	837,496.03	....	....	541,226.46	151,235.36	36,967.33	(d)	1,566,925.18	(d)
Southern Express Company	160,928.16	83,768.18	....	....	61,483.80	8,161.20	5,813.16	1,230.48	160,456.82	471.34
United States Express Company.	325,985.38	153,801.33	993.79	....	122,562.22	4.765.83	3,555.89	39,603.67	325,282.73	702.65
Wells, Fargo & Co.'s Express	764,390.40	362,721.75	....	....	244,503.65	15,861.68	6,508.55	132,670.04	762,265.67	2,124.73

a The total expenditures, $45,783,123.32, include dividends.
b Partial report, the express company being a department of the railroad whose name it bears.
c Returns included in report of railway company of which the express company is a department.
d None reported.
e Included in the operating expenses of the Denver and Rio Grande railroad.
f Included in those of the Denver and Rio Grande railroad.

TABLE 5.—EXPENDITURES OF EXPRESS COMPANIES FOR THE YEAR ENDING JUNE 30, 1890—Continued.

PART 1.—BY COMPANIES IN EACH GROUP—Continued.

COMPANIES.	Total	OPERATING EXPENSES. Paid to railways.	Paid to water lines.	Paid to stage lines.	Paid for salaries and wages.	Paid for local expenses and repairs.	Paid for general expenses.	Paid for other expenses of operation.	Total operating expenses.	Taxes.
Group IX	$1, 364, 034. 92	$639, 814. 21	$69. 48	....	$490, 891. 06	$94, 916. 17	$24, 772. 90	$101, 816. 20	$1, 361, 280. 02	$2, 754. 90
Pacific Express Company	669, 560. 52	325, 000. 67	....	....	257, 069. 02	70, 305. 64	17, 185. 19	(*a*)	669, 560. 52	(*a*)
Southern Express Company	115, 144. 82	42, 900. 83	....	....	54, 437. 04	12, 614. 28	2, 553. 36	1, 495. 80	114, 001. 31	1, 143. 51
United States Express Company.	22, 824. 88	10, 753. 05	69. 48	....	8, 602. 52	333. 20	248. 61	2, 768. 90	22, 775. 76	49. 12
Wells, Fargo & Co.'s Express.	556, 504. 70	261, 159. 66	....	....	179, 782. 48	11, 663. 05	4, 785. 74	97, 551. 50	554, 942. 43	1, 562. 27
Group X	1, 785, 199. 21	720, 925. 28	21, 009. 41	$50, 100. 71	606, 084. 67	48, 886. 80	19, 046. 12	314, 115. 86	1, 780, 168. 85	5, 030. 36
Pacific Express Company	106, 861. 56	60, 771. 70	3, 462. 77	472. 67	27, 186. 31	11, 331. 94	3, 636. 17	(*a*)	106, 861. 56	(*a*)
Wells, Fargo & Co.'s Express.	1, 678, 337. 65	660, 153. 58	17, 546. 64	49, 628. 04	578, 898. 36	37, 554. 86	15, 409. 95	314, 115. 86	1, 673, 307. 29	5, 030. 36
Not divided by groups (Northern Pacific Express Company).	794, 392. 06	403, 023. 30	2, 648. 85	533. 03	257, 993. 58	....	66, 683. 67	54, 143. 88	785, 026. 31	9, 365. 75
Dividends as reported by companies in Part 2 of this table.	3, 198, 048. 31	....	....	....	....	....	....	....	....	....

a None reported.

PART 2.—BY COMPANY TOTALS. (*a*)

COMPANIES.	Total expenditures.	OPERATING EXPENSES. Paid to railways.	Paid to water lines.	Paid to stage lines.	Paid for salaries and wages.	Paid for local expenses and repairs.
Total expenditures for United States	$45, 783, 123. 32	$19, 327, 280. 49	$173, 222. 13	$60, 679. 38	$16, 176, 097. 55	$3, 560, 045. 83
Adams Express Company	11, 042, 592. 45	4, 504, 263. 40	69, 833. 12	5, 502. 38	3, 869, 111. 21	1, 273, 432. 98
American Express Company	12, 132, 694. 68	4, 878, 846. 33	16, 747. 00	4, 069. 71	4, 388, 193. 11	1, 282, 284. 25
Camden and Atlantic Express Company	16, 696. 09	3. 46	552. 68	....	11, 399. 34	....
Cincinnati, Georgetown and Portsmouth Express Company	1, 080. 00	....	....	....	1, 080. 00	....
Denver and Rio Grande Express	152, 188. 13	....	....	....	106, 071. 34	35, 849. 07
Dominion Express Company	10, 986. 12	5, 940. 00	....	....	3, 648. 00	35. 44
Earle & Prew's Express	228, 604. 66	48, 579. 50	21, 800. 00	....	84, 740. 83	36, 689. 80
Long Island Express Company	....	....	....	....	....	....
National Express Company	623, 225. 29	248, 503. 11	1, 250. 17	473. 55	236, 964. 71	60, 968. 59
New England Despatch Express Company	120, 503. 02	22, 497. 16	13, 972. 63	....	52, 271. 00	22, 460. 71
New York and Boston Despatch Express Company	413, 506. 60	123, 374. 42	4, 244. 68	....	176, 037. 22	84, 115. 47
Northern Pacific Express Company	933, 520. 55	403, 023. 30	2, 648. 85	533. 03	257, 993. 58	....
Pacific Express Company	3, 726, 491. 75	1, 974, 295. 89	3, 462. 77	472. 67	1, 304, 595. 44	356, 518. 99
Southern Express Company	3, 040, 342. 08	1, 442, 594. 50	245. 64	....	1, 251, 078. 72	190, 881. 42
United States Express Company	7, 355, 256. 62	3, 255, 594. 44	20, 917. 95	....	2, 602, 037. 02	100, 179. 05
Wells, Fargo & Co.'s Express	5, 938, 766. 71	2, 418, 145. 44	17, 546. 64	49, 628. 04	1, 797, 821. 38	116, 630. 06
West Jersey Express Company	46, 668. 57	1, 619. 54	....	....	33, 054. 65	....

COMPANIES.	OPERATING EXPENSES—continued. Paid for general expenses.	Paid for other expenses of operation.	Total operating expenses.	Taxes.	DIVIDENDS. Amount.	Rate per cent.
Total expenditures for United States	$826, 715. 50	$2, 289, 663. 82	$42, 413, 704. 70	$171, 370. 31	$3, 198, 048. 31	....
Adams Express Company	132, 452. 38	196, 968. 28	10, 051, 563. 75	31, 028. 70	960, 000. 00	8. 00
American Express Company	262, 323. 79	147, 098. 19	10, 979, 562. 38	73, 132. 30	1, 080, 000. 00	6. 00
Camden and Atlantic Express Company	54. 32	4, 686. 29	16, 696. 09	....	....	....
Cincinnati, Georgetown and Portsmouth Express Company	....	....	1, 080. 00	....	....	....
Denver and Rio Grande Express	9, 638. 35	629. 37	152, 188. 13	....	....	....
Dominion Express Company	887. 50	472. 00	10, 982. 94	3. 18	....	....
Earle & Prew's Express	2, 236. 40	9, 875. 66	203, 922. 19	320. 50	21, 361. 97	....
Long Island Express Company	....	....	....	....	....	....
National Express Company	16, 057. 42	18, 755. 17	582, 972. 72	3, 052. 57	37, 200. 00	8. 00
New England Despatch Express Company	1, 410. 92	6, 709. 00	119, 321. 42	*b*1, 181. 60	....	....
New York and Boston Despatch Express Company	3, 452. 72	12, 985. 23	404, 209. 74	1, 939. 01	7, 357. 85	....
Northern Pacific Express Company	66, 683. 67	54, 143. 88	785, 026. 31	*c*9, 365. 75	139, 128. 49	....
Pacific Express Company	87, 145. 99	....	3, 726, 491. 75	....	....	....
Southern Express Company	121, 558. 07	13, 123. 86	3, 019, 482. 21	20, 859. 87	....	....
United States Express Company	74, 889. 22	836, 774. 84	6, 890, 392. 52	14, 864. 10	450, 000. 00	4. 50
Wells, Fargo & Co.'s Express	47, 857. 39	975, 515. 03	5, 423, 143. 98	15, 622. 73	500, 000. 00	8. 00
West Jersey Express Company	67. 36	11, 927. 02	46, 668. 57	....	....	....

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a Totals given are for 16 companies only, 4 of which are partial reports, namely, the 3 companies shown in Part 1 as being departments of the railroads whose names they bear, and the Denver and Rio Grande Express.

b Includes interest payments, $800.

c Represents deductions from income.

TABLE 5.—EXPENDITURES OF EXPRESS COMPANIES FOR THE YEAR ENDING JUNE 30, 1890—Continued.

PART 3.—BY GROUP TOTALS. (*a*)

GROUPS.	Total expenditures.	OPERATING EXPENSES.				
		Paid to railways.	Paid to water lines.	Paid to stage lines.	Paid for salaries and wages.	Paid for local expenses and repairs.
Total expenditures for United States	$45, 783, 123. 32	$19, 327, 280. 49	$173, 222. 13	$60, 679. 38	$16, 176, 097. 55	$3, 560, 045. 83
Group I	4, 328, 704. 79	1, 681, 423. 73	105, 439. 27	1, 620. 61	1, 758, 528. 52	571, 751. 50
II	11, 156, 744. 96	4, 396, 300. 16	20, 005. 06	779. 60	4, 606, 737. 98	1, 289, 235. 83
III	6, 102, 306. 70	3, 142, 369. 09	14, 409. 44	1, 307. 52	2, 122, 954. 34	365, 451. 38
IV	1, 398, 226. 83	721, 066. 08	875. 11		489, 412. 43	73, 447. 91
V	2, 787, 908. 88	1, 391, 023. 99	718. 50	4, 340. 53	1, 096, 684. 67	176, 568. 91
VI	8, 149, 814. 73	3, 947, 871. 78	7, 053. 22	1, 997. 38	3, 052, 745. 49	611, 189. 24
VII	1, 295, 550. 82	644, 832. 15			432, 291. 28	52, 840. 72
VIII	3, 422, 191. 11	1, 638, 630. 72	993. 79		1, 252, 773. 53	275, 757. 37
IX	1, 364, 034. 92	639, 814. 21	69. 48		499, 891. 06	94, 916. 17
X	1, 785, 199. 21	720, 925. 28	21, 009. 41	50, 100. 71	606, 084. 67	48, 886. 80
Not divided by groups (Northern Pacific Express Company)	794, 392. 06	403, 023. 30	2, 648. 85	533. 03	257, 993. 58	
Dividends as reported by companies in Part 2 of this table	3, 198, 048. 31					

GROUPS.	OPERATING EXPENSES—continued.			Taxes.	DIVIDENDS.	
	Paid for general expenses.	Paid for other expenses of operation.	Total operating expenses.		Amount.	Rate per cent.
Total expenditures for United States	$826, 715. 50	$2, 289, 663. 82	$42, 413, 704. 70	$171, 370. 31	$3, 198, 048. 31	
Group I	71, 114. 98	114, 331. 31	4, 304, 209. 92	24, 494. 87		
II	198, 675. 90	590, 972. 73	11, 102, 707. 26	54, 037. 70		
III	80, 915. 17	356, 976. 02	6, 084, 382. 96	17, 923. 74		
IV	77, 772. 87	29, 044. 24	1, 391, 618. 64	6, 608. 19		
V	53, 664. 62	47, 069. 74	2, 770, 070. 96	17, 837. 92		
VI	150, 888. 04	350, 957. 89	8, 122, 703. 04	27, 111. 69		
VII	15, 822. 55	147, 390. 05	1, 293, 176. 75	2, 374. 07		
VIII	67, 358. 68	182, 845. 90	3, 418, 359. 99	3, 831. 12		
IX	24, 772. 90	101, 816. 20	1, 361, 280. 02	2, 754. 90		
X	19, 046. 12	314, 115. 86	1, 780, 168. 85	5, 030. 36		
Not divided by groups (Northern Pacific Express Company)	66, 683. 67	54, 143. 88	785, 026. 31	9, 365. 75		
Dividends as reported by companies in Part 2 of this table					3, 198, 048. 31	

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a Totals given are for 16 companies only, 4 of which are partial reports, namely, the 3 companies shown in Part 1 as being departments of the railroads whose names they bear, and the Denver and Rio Grande Express.

TABLE 6.—BUSINESS DONE BY EXPRESS COMPANIES DURING THE YEAR ENDING JUNE 30, 1890.

PART 1.—BY COMPANIES IN EACH GROUP. (a)

COMPANIES.	Number of freight waybills issued.	Number of packages carried on freight waybills.	Weight of packages carried on freight waybills. (Tons).	Number of money waybills issued.	Number of packages carried on money waybills.	Number of money orders issued.
Total for United States	44,475,528	98,118,430	1,646.273	11,614,676	17,258,682	4,598,567
Group I	4,700,815	11,250,034	235,932	1,039,366	1,895,928	142,383
Adams Express Company	1,353,640	3,106,653	38,833	278,114	486,000	
American Express Company	2,627,283	4,072,288	151,795	552,165	784,074	132,650
Dominion Express Company	10,260	21,936	294	10,020	13,836	
Earle & Prew's Express	114.000	1,930,000	19.110	48,000	288,000	
National Express Company	90,224	174,133	4,325	18,714	30,316	
New England Despatch Express Company	25,000	75,000	1,375	3,344	9,500	
New York and Boston Despatch Express Company	224,672	1,349,160	13,957	60,977	179,410	
United States Express Company	255,736	520,864	6,243	68,032	104,792	9,733
Group II	11,125,713	24,325,360	413,090	2,471,826	3,462,415	422,034
Adams Express Company	4,036,470	9,741,149	122,775	914,401	1,415,904	
American Express Company	3,226,996	5,001,843	120,180	680,348	966,094	225,101
Camden and Atlantic Express Company (b)						
Long Island Express Company	419,072	1,079,879	12,298	37,610	48,243	
National Express Company	516,533	996,908	24,044	109,568	177,510	
United States Express Company	2,322,676	5,089,720	108,727	588,228	642,152	138,764
Wells, Fargo & Co.'s Express	603,966	2,415,861	25,066	141,671	212,512	58,169
West Jersey Express Company (b)						
Group III	7,069,230	13,137,149	254,481	1.832,769	2,439,067	785,788
Adams Express Company	2,172,328	3,883,394	58,805	510,183	722,700	
American Express Company	2,237,540	3,266,808	113,044	627,100	865,398	511,067
Cincinnati, Georgetown and Portsmouth Express Company (c)			500			
Pacific Express Company	77,825	143,198	2,092	31,633	43,569	9,331
United States Express Company	1.889,060	3,073,840	51,301	501,420	563,744	219,405
Wells, Fargo & Co.'s Express	692,477	2,769,909	28,739	162,433	243,656	45,985
Group IV	1,177,715	2,855,018	30,800	278,009	419,858	8,793
Adams Express Company	550,427	1,328,338	16,225	124,691	192,096	
Southern Express Company	396,620	1,032,996	3,302	68,382	133,526	
United States Express Company	230,668	493,684	11,273	84,936	94,236	8,793
Group V	2,629,090	7,307,424	71,765	790,205	1,640,598	63,032
Adams Express Company	630,676	1,365,465	19,602	170,007	240,900	
Pacific Express Company	121,102	222,827	3,256	49,224	67,798	13,966
Southern Express Company	1,639,876	4,995,488	38,085	473,286	688,480	
United States Express Company	237,436	723,644	10,822	97,688	643,420	49,066
Group VI	9,258,576	14,715,137	348,455	2,688,391	3,765,553	1,598,875
Adams Express Company	1,214,636	2,129,589	33,917	294,862	384,060	
American Express Company	4,748,767	6,933,199	184,281	1,329,965	1,835,351	1,245,546
Pacific Express Company	737,848	1,321,641	19,083	297,325	399,142	41,990
Southern Express Company	62,532	96,936	2,144	32,100	113,820	
United States Express Company	2,276,116	3,359,064	99,955	682,844	956,236	297,662
Wells, Fargo & Co.'s Express	218,677	874,708	9,075	51,295	76,944	13,677
Group VII	1,171,144	3,822,688	42,817	356,277	516,077	155,322
American Express Company	65,270	95,294	1,293	36,886	50,902	9,161
Pacific Express Company	319,679	582,610	8,896	134,975	188,543	60,652
Wells, Fargo & Co.'s Express	786,195	3,144,784	32,628	184,416	276,632	85,509
Group VIII	3,485,217	8,239,117	116,273	1,163,166	1,638,574	454,633
Adams Express Company	654,035	1,251,316	18,295	158,730	208,818	
Denver and Rio Grande Express	198,252	513,300	15,011	56,616	89,608	36,553
Pacific Express Company	1,542,683	2,838,537	41,475	627,054	863,656	195,955
Southern Express Company	104,160	233,988	3,000	43,080	64,320	
United States Express Company	277,990	569,588	9,105	111,588	163,020	77,939
Wells, Fargo & Co.'s Express	708,097	2,832,388	29,387	166,098	249,152	144,186
Group IX	1,291,335	3,572,779	43,303	443,644	649,024	141,855
Pacific Express Company	717,155	1,319,565	19,281	291,502	401,492	88,646
Southern Express Company	33,508	144,168	1,953	16,380	48,900	
United States Express Company	20,012	26,408	461	15,632	15.432	4,190
Wells, Fargo & Co.'s Express	520,660	2,082,638	21,608	122,130	183,200	49,019
Group X	1,796,893	6,969,224	73,268	439,747	661,668	647,508
Pacific Express Company	120,369	263,128	3.689	46,490	71.764	46,656
Wells, Fargo & Co.'s Express	1,676,524	6,706,096	69,579	393,257	589,904	600,852
Not divided by groups (Northern Pacific Express Company)	769,800	1,924,500	16,089	111,276	169,920	178,344

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[a] Two express companies did not report because they were merely departments of railroad companies bearing same name.
[b] Returns included in report of railway company of which the express company is a department.
[c] Partial report, the express company being a department of the railroad whose name it bears.

TABLE 6.—BUSINESS DONE BY EXPRESS COMPANIES DURING THE YEAR ENDING JUNE 30, 1890—Continued.

PART 2.—BY COMPANY TOTALS. (*a*)

COMPANIES AND GROUPS.	Number of freight waybills issued.	Number of packages carried on freight waybills.	Weight of packages carried on freight waybills. (Tons.)	Number of money waybills issued.	Number of packages carried on money waybills.	Number of money orders issued.
Total for United States	44, 475, 528	98, 118, 430	1, 646, 273	11, 614, 676	17, 258, 682	4, 598, 567
Adams Express Company	10, 612, 212	22, 805, 904	308, 452	2, 450, 988	3, 650, 478	
American Express Company	12, 905, 856	19. 369, 432	570, 593	3, 226. 464	4, 501, 819	2, 123, 525
Camden and Atlantic Express Company (*b*)						
Cincinnati, Georgetown and Portsmouth Express Company (*c*)			500			
Denver and Rio Grande Express	198, 252	513, 300	15, 011	56, 616	89, 608	36, 553
Dominion Express Company	10, 260	21, 936	294	10, 020	13, 836	
Earle & Prew's Express	114, 000	1, 930, 000	19, 110	48, 000	288, 000	
Long Island Express Company	419, 072	1, 079, 879	12, 298	37, 610	48, 243	
National Express Company	606, 757	1 171, 041	28, 369	128, 282	207, 826	
New England Despatch Express Company	25, 000	75, 000	1, 375	3, 344	9, 500	
New York and Boston Despatch Express Company	224, 672	1, 349, 160	13, 957	60, 977	179, 410	
Northern Pacific Express Company	769, 800	1, 924, 500	16, 089	111, 276	169, 920	178, 344
Pacific Express Company	3, 636. 661	6, 691, 506	97, 772	1, 478, 203	2, 035, 964	457, 196
Southern Express Company	2, 236, 696	6, 503, 576	48, 484	633, 228	1, 049, 046	
United States Express Company	7, 509, 694	13, 856, 812	297, 887	2, 148, 368	3, 183, 032	805, 552
Wells, Fargo & Co.'s Express	5, 206, 596	20, 826, 384	216, 082	1, 221, 300	1, 832, 000	997, 397
West Jersey Express Company (*b*)						

PART 3.—BY GROUP TOTALS. (*a*)

COMPANIES AND GROUPS.	Number of freight waybills issued.	Number of packages carried on freight waybills.	Weight of packages carried on freight waybills. (Tons.)	Number of money waybills issued.	Number of packages carried on money waybills.	Number of money orders issued.
Total for United States	44, 475, 528	98, 118, 430	1, 646, 273	11, 614, 676	17, 258, 682	4, 598, 567
Group I	4, 700, 815	11, 250, 034	235, 932	1, 039, 366	1, 895, 928	142, 383
II	11, 125, 713	24, 325, 360	413, 090	2, 471, 826	3, 462, 415	422, 034
III	7, 069, 230	13, 137, 149	254, 481	1, 832, 769	2, 439, 067	785, 788
IV	1, 177, 715	2, 855, 018	30, 800	278, 009	419, 858	8, 793
V	2, 629, 090	7, 307, 424	71, 765	790, 205	1, 640, 598	63, 032
VI	9, 258, 576	14, 715, 137	348, 455	2, 688, 391	3, 765, 553	1, 598, 875
VII	1, 171, 144	3, 822, 688	42, 817	356, 277	516, 077	155, 322
VIII	3, 485, 217	8, 239, 117	116, 273	1, 163, 166	1, 638, 574	454, 633
IX	1, 291, 335	3, 572, 779	43, 303	443, 644	649, 024	141, 855
X	1, 796, 893	6, 969, 224	73, 268	439, 747	661, 668	647, 508
Not divided by groups (Northern Pacific Express Company)	769, 800	1, 924, 500	16, 089	111, 276	169, 920	178, 344

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a Totals given are for 15 companies, of which 1 is only a partial report.
b Returns included in report of railway company of which the express company is a department
c Partial report, the express company being a department of the railroad whose name it bears.